E/ECA/TCD/17

UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA, 1978-1988

VOLUME III

APPROVED PROGRAMME OF ACTION FOR THE SECOND PHASE

1984-1988

ANALYSIS AND PRESENTATION OF THE

COMMUNICATIONS SECTOR PROGRAMME

E/NAIROBI.

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FOREWORD

In 1981 the second meeting of the Conference of African Ministers of Transport, Communications and Planning requested the Economic Commission for Africa by resolution ECA/UNTACDA/Res.81/14 to draw up the programme for the second phase period, 1984-1988. The plan of action for the preparation of the draft programme, which was approved by the same resolution was as follows:

- preparation by member States and intergovernmental bodies of provisional lists of projects which they wished to see included in the programme. These lists were to be sent to the ECA secretariat in October 1981.

- subsequent analysis of these lists and project profiles by sectoral working groups composed of representatives of the Inter-Agency Co-ordinating Committee for the implementation of the Decade. 1/

- recruitment of consultants and field missions throughout the region in order to:

  (i) collect information on the status of implementation of the first phase programme, to assist member countries to update projects wherever necessary and to determine whether some projects not yet initiated were to be postponed to the second phase programme or cancelled;

  (ii) identify new projects to be included in the second phase programme.

- drafting of project profiles for all projects to be included in the second phase programme indicating priorities in accordance with the Global Strategy for the Decade (doc. E/CN.14/726, vol.I) and the Lagos Plan of Action.

1/ The members of this Committee were ECA, the Organization of African Unity (OAU), the specialized agencies of the United Nations and of OAU and African inter-governmental organizations with legitimate interest in transport and communications development in the African region. The groups actually met in February 1982.

- examination of the zero draft programme by the second meeting of the working groups of the Inter-Agency Co-ordinating Committee (in September 1982) and, subsequently, by the Committee itself in October 1982.

The second draft of the second phase programme was subsequently compiled into volume III. This volume comprised the following sections:

- document entitled Presentation and General Analysis;
- summary tables with financial data for each project;
- documents containing project profiles for each of the 12 subsectors. Each of these documents carried an introduction and summary analysis of the subsectoral programme and tables indicating the priority and category of each project within the subsector.

Projects were set into priorities and categorized as follows in accordance with the approved Global Strategy;

- First priority: Regional, subregional projects and national projects with a subregional impact
- Second priority: National projects for disadvantaged countries 2/ and including:
  - category A projects: rehabilitation, maintenance and ongoing projects
  - category B projects: projects for which feasibility/ engineering studies are available and therefore ready for investment
  - category C projects: projects for which there are no feasibility studies
  - category D projects: which were study projects not necessarily leading to investments, technical assistance or training projects
- Third priority: National projects of the other countries, categorized on the same basis

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2/ See document DEC/TRANSCOM/CM/III/3, page 3.

It needs to be stressed that the projects in the first draft programme emanated from all ECA member countries. These projects were identified and selected by them; 3/ the programme is therefore theirs.

The first draft programme was subsequently examined by the third Intergovernmental Meeting of Experts in Transport, Communications and Planning (Addis Ababa, 5 to 14 January 1983). This meeting recommended the draft programme with amendments, additions and deletions of some projects to the third Conference of African Ministers of Transport, Communications and Planning which met in Cairo, Egypt, 8 to 11 March 1983.

The Conference of Ministers, after examining the report on the status of implementation of the first phase programme (1980-1983) as well as the draft programme for the second phase, and, noting with some concern that

(a) only 50 per cent of the funds required for the implementation of the first phase programme had so far been raised;

(b) the present unfavourable international economic climate was a constraint to be taken into account in drawing up a realistic programme for the second phase.

laid down eight guidelines 4/ for the revision of the draft programme and requested each member State to revise its package of projects for the second phase accordingly and submit same by 30 June 1983. The Conference also reaffirmed the Global Strategy, objectives and priorities it laid down in 1979 for the implementation of the Decade programme.

This programme now submitted is therefore in accord with the guidelines issuing from the third Conference of Ministers of Transport, Communications and Planning. Its presentation also follows the broad recommendations of the Paris Roundtable (21 to 24 June 1983) organized by ECA in association with the Government of France to refine the land transport component of the over-all second phase programme.

It was subsequently approved by the fourth Conference of Ministers of Transport, Communications and Planning in Conakry, Guinea from 7 to 11 February 1984.

3/ Missions were fielded in 49 out of the 50 member States.

4/ Document E/ECA/CM.9/26 of 24 March 1983.

Chapter 1. INTRODUCTION

1. The communications sector of the programme of the United Nations Transport and Communications in Africa covers the subsectors (i) telecommunications, that is telephone, telex and telephone derived common-carrier communication, (ii) broadcasting, that is radio or sound broadcasting and television, and (iii) postal services. Apart from radio or sound broadcasting and television, the other mass media are not covered by the Decade programme, which is in the main concerned with infrastructural and manpower development. Certain basic resources must exist for any successful national development planning and plan implementation. These resources include not only the physical such as raw materials and energy, but also informational resources such as certain levels of knowledge, education and organizational order.

2. In Africa there is a lack of adequate communication facilities. This inadequacy is not for want of demand as illustrated by the relatively high unofficial market price for the telephone service as well as by the eagerness of political and community leaders to exploit broadcasting in education, health, agriculture and industry.

3. Taking account of the scarcity of capital resources, and the urgent needs of other economic sectors such as agriculture, energy and transport, there seems to be a serious under-allocation of national resources to telecommunications, broadcasting and postal services in Africa as a whole. Consequently the region is increasingly lagging behind other developing regions of the world in the extent and quality of communication facilities. The cause of this may be attributed to the paucity of systematic and quantitative data to persuade planners on the extent of economic and social benefits generated by the communications sector in developing countries. Fortunately this inadequacy of quantitative data in support of the communications sector's potential as a tool for social and economic development is expected to be made good by a number of studies recently initiated by some organizations including the International Telecommunication Union (ITU), the Organization for Economic Co-operation and Development (OECD) and the World Bank working jointly or individually.

4. The successful implementation of the Decade programme will require co-ordination not only at the regional and subregional levels but at the national level as well. To achieve this it might be useful for member countries to set up appropriate national committees for formulating overall communication policies and for monitoring project implementation, as has been recommended by a number of conferences and meetings on communications development organized separately by ECA, ITU and United Nations Educational, Scientific and Cultural Organization (UNESCO).

5. At the regional or international level institutions such as ECA, OAU, ITU, UNESCO, Union of National Radio and Television Organizations of Africa (URTNA), African Posts and Telecommunications Union (UAPT), Pan-African Telecommunications Union (PATU), Pan-African Postal Union (PAPU) would have to continue to harmonize development of telecommunications, broadcasting and postal systems. It is important that the role of the regional institutions be preserved if the objectives of the Decade's communications sector programme are to be achieved.

Chapter 2. CURRENT SITUATION AND REVIEW OF THE FIRST PHASE PROGRAMME

6. The level of development of telecommunications and broadcasting facilities in Africa is very low by world standards. The number of telephone lines per 100 inhabitants, which is typically between 20 to 70 in industrialized countries, is less than one in most countries of the region. While the land mass of Africa is about 23 per cent of that of the world and the population about 10 per cent, the number of radio transmitters is less than 3 per cent. The number of sound receivers per 1,000 of the population is around one-fifth of the world average and the number of television sets is just seven per 1,000, compared to a world figure of 131 per 1,000.

7. Against this background there is an enormous potential for both telecommunications, postal and broadcasting services to promote the social and economic development of the continent.

A. THE ROLE OF TELECOMMUNICATIONS

8. Telephone, telex and mail services are a vital infrastructure for the growth of industry, commerce, agriculture and other sectors of the economy. Communication services are essential for the effective management and control of any industrial operation. The purchasing of materials requires knowledge of supply conditions and prices in local and distant markets. Order taking, delivery and billing involve co-ordination with customers, who are typically in diverse locations. Skilled labour needs to be allocated efficiently, and inventory, maintenance and production management often require co-ordination of activities at different sites. In modern industrial plant telecommunications play an integral part in marketing and distribution procedures.

9. The need for postal and telecommunication services is even more apparent in the case of commerce than in that of manufacturing industry. Commerce is essentially an information-processing activity: effective buying, selling and brokerage rely on a continual supply of up-to-date information regarding the availability and prices of goods and services.

Although the sum of money involved are very difficult, the principle that speedy communication leads to efficient market operation is as true for local village trading as for international commodity dealing. The increased availability of public telephones is an example of how telecommunication facilities can improve economic efficiency while also providing broad social benefits through improved access to communication services. The role of postal services in aiding monetary and financial transactions as well as in mobilizing savings is yet to be fully exploited.

10. The sector in which the potential of telecommunications has perhaps been most neglected is the agricultural sector. Farmers must not only grow food but must sell it effectively and must buy seeds and fertilizers. Price information is an important commodity in its own right, access to which allows farmers to trade more efficiently and on more equitable terms in the marketplace. They also have use for information on weather conditions, disease outbreaks and new agricultural techniques. Telecommunication services can assist farmers by helping them to arrange for timely supplies, effective collection of produce and access to agricultural information.

B. THE ROLE OF BROADCASTING

11. Broadcasting services play a similar important role in the development process. Radio and television programmes can be used to educate and inform the citizenry and enhance the sense of cultural and national unity in areas where geographical isolation, illiteracy and economic deprivation prevent the spread of information by other means. Radio is the chief source of news and information about the world around to many inhabitants of the region. The mass media can also perform the valuable social functions of preserving cultural integrity and traditions.

12. Broadcast services have a particularly important role in the education process. There have been many instances in which radio and television programmes have contributed to schooling and literacy in Africa. Not only conventional to schooling but also adult education has benefited; programmes can popularize scientific knowledge, instruct viewers or listeners in social and political history, and provide training in specific crafts and trades. Broadcast services also promote civic education, informing audiences of the nature of administrative systems and of the specific social services available to them. They can also provide effective media for communications support in national or rural oriented development programmes.

13. Rural areas suffer particularly from lack of adequate broadcast facilities. National development agencies working in any aspect of rural development - agricultural extension, hygiene, education, family planning or community programmes - generally face a chronic shortage of skilled personnel available to support their projects. Communication media can often help to compensate for this shortage of personnel. Very considerable potential for broadcasting as a tool for rural development has been demonstrated by the experience gained to date.

14. Thus the ability of both telecommunications and broadcast services to make a central contribution to the achievement of national goals is being recognized by governments throughout Africa. To support the objective of sustained development of the continent, major investments in the provision of telecommunication and broadcast facilities are required. In the industrialized countries economic progress has been accompanied by substantial expenditures on developing such facilities. Similar investments will be required in Africa if balanced growth in the economies is to be achieved.

C. THE ROLE OF POSTAL SERVICES

15. Postal services in Africa, as elsewhere, are part of a world-wide system that transcends national, regional and international frontiers. In African countries, however, this universality concept is seriously affected by the inadequate sorting, transit, exchange office infrastructure and constraints on the smooth flow of outgoing and incoming external mail.

16. Everywhere in the world, the Post is a public service, though alternative and private sector messenger and parcel services have appeared in some countries in competition with the public sector.

(a) It is clear therefore that at the national level the Post should help give impetus to the economic, social and cultural life of the community including those in the rural areas. Africa is in the process of urbanization but the bulk of its population still lives in non-urbanized zones. One of the development objectives of the Post should therefore be to improve the services which it offers to rural populations. The scope and effectiveness of its activity depend to some extent on the existence of appropriate infrastructures, which should be capable of providing optimum service to the user at the lowest possible cost to the community.

(b) The Post plays an essential role in trade, both within a given country and in the country's relationships with other countries. Therefore at the subregional and regional level, in respect to postal exchange between African countries there is an urgent need for structured and co-ordinated networks in order to eliminate the lengthy and costly "triangular" routes via Europe.

(c) It is clear, however, that a substantial improvement in the Post must be preceded by improvement in the qualifications and attitudes of postal staff. The objectives of training should therefore be viewed in the light of the entire programme of the Decade.

D. THE UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA

17. Recognizing the need for an effective transport and communications infrastructure, the United Nations proclaimed a Transport and Communications Decade in Africa for the years 1978-1988.* The principal goal of the Decade is to achieve independence, self-reliance and international co-operation among African countries in the field of transport and communications. The communication sector programme of the Decade can be said to have been designed to help co-ordinate the development of communication systems and supporting institutions in the member countries. The sector programme lays emphasis on:

(a) upgrading and expansion of national networks;

(b) development of communication capabilities in rural communities;

(c) rapid expansion of communication skills and manpower development institutions;

(d) appropriate exploitation of the new communication technologies for national and inter-regional communications, and continuing expansions of the terrestrial communication network project (Pan-African Telecommunications Network - PANAFTEL);

(e) promoting the establishment of telecommunication, broadcasting and postal equipment manufacturing facilities.

18. Certain specific targets have been set for the Decade in terms of the penetration of communication services. In the common-carrier sub-sector the tentative objective is to achieve an average density of penetration of one telephone per 100 of the population as against the current world average of 14.7. The objective for the broadcasting sub-sector is to achieve full sound broadcast coverage for each country, and an increase of sound broadcasting receiver penetration from the present seven to 20 sets per 100 of the population. In the postal sub-sector the target is one post office to serve 3,000 to 6,000 inhabitants.

E. THE FIRST PHASE PROGRAMME SUB-SECTORAL REVIEW

19. The programme for the first phase of the Decade comprised 312 projects estimated to cost $1.11 billion and was broken down as follows:

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*Resolution 32/160 of the United Nations General Assembly, 19 December 1977.

Table 1. Summary table for UNTACDA phase I programme

Sub-sector	Number of projects	Estimated cost (in million $)	No. of projects transferred to phase II	Percentage implementation (by number of projects)
TEP	90	531.1	75	17
SAP	2	7.7	1	50
BRP	115	211.8	95	17
POP	84	241.5	67	20
MAP	21	125.8	16	24
Total	312	1117.9	254	19

20. Financing obtained at July 1982 amounted to some $261 million, that is 23.4 per cent of programme total.

The first phase programme and the objectives of the Decade

21. The over-all objectives of the Decade programme as stated in UNTACDA document volume I: Global Strategy and Plan of Action (document/E/CN.14/726, Vol. I) are:

(a) Promotion of the integration of transport and communications infrastructure with a view to increasing intra-African trade;

(b) Ensuring the co-ordination of the various systems in order to increase their efficiency;

(c) Opening up of the land-locked countries and isolated regions;

(d) Harmonization of national regulations and reduction to a minimum of physical and non-physical barriers with the aim of facilitating the movement of persons, goods and ideas;

(e) Stimulating the use of local human and material resources, the standardization of networks and of equipment, research and dissemination of techniques adapted to the African context in the building of transport and communication infrastructures;

(f) Promotion of an African industry in the field of transport and communication equipment;

(g) Mobilization of technical and financial resources during the Decade with a view to promoting the development and modernization of transport and communication infrastructures in Africa;

(h) Restructuring of the transport sector to ensure African trade with the rest of the world under the most favourable conditions for the continent.

22. A review of the extent to which the communications sector projects put forward and subsequently implemented (albeit in part) meet the Decade's objectives can only be useful if related to the objectives for the sector as contained in the Global Strategy document. These are in sum:

(a) Effective maintenance and efficient operation of existing services and networks;

(b) Development of adequate manpower at all levels of skills;

(c) Expansion of infrastructure through adequate provision of material resources in order to attain reasonable levels of service availability especially for rural communities;

(d) Development of medium and long-term national as well as regional Master Plan for communications development;

(f) Harmonization of tariffs and international accounting procedures in order to facilitate intra-regional communication relations;

(g) Establishment of industries for the production of basic equipment (such as receiving sets, cables, telephones, etc.).

23. And to facilitate the achievement of these objectives, the Global Strategy document also makes mention of targets of development to be attained during the Decade:

(a) Telecommunications: a target of one telephone per 100 inhabitants and one public telephone booth for 10,000 inhabitants (in rural isolated communities);

(b) Broadcasting: a target for the development indicator of 20 radio receiving sets per 100 inhabitants and availability of one receiving set for every household; and full national coverage for sound broadcasting in each member country;

(c) Postal: the target is one post office to serve 3,000 to 6,000 inhabitants.

TELECOMMUNICATIONS

24. During the four years since the Decade was initiated, telecommunications systems in Africa have been extended and improved significantly, but the rate of development still lags far behind targets in most areas. International traffic is increasing rapidly, due mainly to the installation of new satellite earth stations and the extension of the PANAFTEL network. The number of telephone stations in Africa continues to increase, especially in urban areas but still averages less than 0.7 lines per 100 inhabitants. This may be compared to conditions in Asia and South America where there are 2.8 and 5.2 phone lines per 100 inhabitants respectively. Rural areas in Africa remain especially poorly served and with some exceptions are given low priority by national telecommunication organizations. The low initial revenue potential of rural services is responsible for the second place accorded them in relation to the construction of urban, interurban and international circuits.

25. In 1979 a Decade goal was set at one per cent telephone penetration for all African countries by 1988. The 3.6 per cent annual growth rate achieved in telephones during the past four years is inadequate to achieve this objective. It is now estimated that most countries will have to expand their telecommunications infrastructure at about 50 per cent more on the current annual growth rate to meet the original Decade goal by 1988.

26. The overriding obstacle to satisfactory long-run development of telecommunications services is the lack of skilled manpower, especially of trained engineers. Many countries report fewer than 20 professional engineers in their administrations and have little capacity for increasing the number who qualify each year. Technician labour is also in very short supply, despite the emphasis placed on manpower training at this level in the Phase I submissions. Finally, lack of professionally qualified personnel seriously limits the effectiveness of planning management and accounting functions within administrations. The development of training facilities must continue to receive high priority during Phase II.

27. With regard to the expansion of technical facilities the most important single project continues to be the construction of the (PANAFTEL) Network. Its principal objective is the provision of high quality telephone, telex and video circuits in African countries; the fact that some traffic within the region still has to be routed through transit centres in Europe is a major constraint on the development of effective intra-African trade. The PANAFTEL project has been underway for several years now and many of its component links are operational; to date, 23,000 km of radio-relay routes, troposcatter systems, coaxial and submarine cable have been put into service. A further 10,000 route-km of wide-band transmission facilities are due for completion before the end of the Phase I period. In addition to the transmission routes, 34 international automatic telephone switching centres are expected to be operational by 1983. A few more transmission link projects are included in the Phase II programme.

28. Specific developments in each of the subregions are noted below:

North Africa

29. North African countries are provided, in general, with a better level of telecommunication services than those of any other subregion. With the exception of the Sudan, all have met the target of one telephone per 100 of the population. Nevertheless they continue to have technical and organizational problems. Demand for telephone service is very high, so long waiting lists - extreme cases up to 12 years - building up. The quality of service is generally low due to circuit congestion and equipment unavailability.

30. Only one project concerning improved rural telecommunications was submitted from this subregion for inclusion in the Phase I programme of the Decade. This project has been continued into Phase II.

Central Africa

31. The provision of telecommunication services in Central Africa is normally the responsibility of a government ministry or a semiautonomous PTT. These organizations are typically concerned with a wide range of national communication services, and so it is often difficult to assess the performance of the telecommunications department separately. In general, these departments are overmanned with underqualified personnel for the tasks required. As a group, the 10 countries of this subregion employ about 10,000 people in their telecommunication organizations but have only 80 professional engineers. Lack of skilled manpower is the most important weakness the countries have in common. Although most of the countries have some form of training institute for technical instruction, these schools tend to be understaffed and inadequately equipped to meet the demands of an agressive telecommunications development programme.

32. At the beginning of the United Nations Transport and Communications Decade, the subregion had an estimated 95,500 telephones in service. Over the past four years the installed base has grown at 4.8 per cent annually and now stands at 115,000 telephones, or 0.21 lines per 100 inhabitants. This is far short of the Decade goal and indicates how underdeveloped the subregion is with respect to the rest of Africa. Service is on the whole difficult to obtain, expensive and unreliable.

33. Some projects are mostly concerned with the construction of inter-urban transmission routes and urban switching facilities. While many of these projects will be continued in the second phase of the Decade, investment in Phase I should total $21.1 million. It is also estimated that an additional $60 million will be spent in this period on related telecommunications projects in the subregion which are not officially listed as part of the Decade.

34. Seven projects carried over from Phase I have been submitted for inclusion in the programme of the next phase of the Decade. Most of these projects are concerned with the extension and rehabilitation of transmission and switching facilities.

West Africa

35. The most successful element of the Phase I programme in West Africa is the implementation of the PANAFTEL Network projects. All 16 countries in the subregion are involved with this group of projects. To date nine of the inter-connecting links are operational and most of the rest are under construction or have obtained financing. Five other PANAFTEL related projects for capacity expansion, route extensions and the construction of international transit centres are also receiving favourable attention.

36. Other projects have not fared as well. None of the regional maritime communications projects have been implemented. They have not attracted outside financing. Of the 33 national projects proposed in Phase I, only two have obtained financing. All of these are concerned with extension of telecommunications facilities to rural areas. Total investment to date in Phase I for the subregion is approximately $14 million. Twenty-nine regional, subregional and national projects from Phase I will be carried over to Phase II for further consideration.

Eastern and Southern Africa

37. Significant progress has been made in the financing and construction of Phase I telecommunications projects in Eastern and Southern Africa, especially of transmission facilities. Zambia succeeded in implementing or funding several proposals, including selected extensions of the national network, earth station upgrading and improvement of telex services. A rural telecommunications study implemented in Kenya is expected to draw attention to the needs of rural areas throughout the subregion, and to encourage the introduction of rural services during Phase II.

38. As in West Africa, substantial progress has been made in the construction of PANAFTEL routes. A microwave route from Lusaka to Dar-es-Salaam entered service in May 1982; the Lilongwe-Chipata link was due to be completed in 1983, and the Francistown (Botswana) - Bulawayo (Zimbabwe) - Livingstone (Zambia) link was completed in 1981. Other links in southern Africa have been presented for financing through the Southern African Development Co-ordination Conference (SADCC) in 1979.

39. Projects concerned with manpower training have been only partially supported. Such activities as have progressed involved national rather than subregional initiatives. Most countries expect to continue to rely on the University of Nairobi and other selected institutions for higher education of personnel.

40. In all, 20 projects worth some $87 million were proposed in Phase I. Fifteen of the original projects are being carried over to Phase II to be considered along with 33 new projects.

BROADCASTING

41. Despite some progress in developing radio and television facilities during Phase I of the Decade, the coverage and quality of broadcasting services in the region remains very poor by world standards. The number of radio receivers held per 100 of population is only eight, the lowest for any continent and only a third of the number in South America. The coverage of television broadcasting is often limited to small areas of the country, due to inadequate transmission facilities or lack of electrical power for receivers.

42. As in the telecommunications sub-sector, the shortage of adequately trained manpower stands out as the most serious impediment to improving broadcast facilities and programmes. Deficiencies of skilled personnel are apparent in three areas: programme production, administration (especially finance and planning) and engineering. The construction and extension of training institutions has not kept pace with needs in any of these three fields; urgent attention should be given to manpower development projects during Phase II.

43. Although countries face different specific local circumstances and orient their plans for broadcasting system development accordingly, several problems are common to much of the region. Financing of investments in the sector is generally found to be a major constraint. This is due partly to the lack of integration of broadcasting development plans in the national development plan, which in turn results from the poor understanding of the role of the media in the processes of social and economic development. There is a widely held desire to extend the coverage of broadcast services to rural areas where typically 80 per cent of the population lives. This often requires substantial expansions of transmission facilities, an area in which some telecommunications projects are expected to help. The completion of PANAFTEL routes would be particularly useful in this respect. Another prerequisite for achieving wider reception in rural areas is greater availability of low-cost receivers; the setting up of local assembly plants would help to bring down prices and conserve valuable foreign exchange. Rwanda, for example, has submitted a Phase II project designed to improve the country's radio receiver manufacturing capability.

44. The extent of progress in the sub-sector varies greatly among countries; a brief summary of developments in each of the subregions follows:

Central Africa

45. Sixteen projects in the broadcasting sub-sector were submitted for Phase I of the Decade by countries of Central Africa. Significant progress has been made in improving facilities in some of the countries, particularly

Cameroon, the Congo, Gabon and Zaire. In these four countries major strides were made during the period 1978-1982 in transmission infrastructure, production equipment and manpower development.

46. Burundi, the Central African Republic and Rwanda by contrast showed little progress. There, the shortages of equipment and personnel are acute and have not been alleviated noticeably during the Phase I period. Two countries, Chad and Equatorial Guinea actually experienced a worsening of the situation, especially with regard to technical facilities. The civil war in Chad resulted in the destruction of much broadcasting equipment, and it will take several years to regain the level of system development present in 1974.

North Africa

47. The North African countries - Morocco, Tunisia, Libyan Arab Jamahiriya, Egypt and the Sudan - have relatively extensive facilities and generally well-trained personnel except for the Sudan.

West Africa

48. Although substantial progress has been made in some areas over the past four years, broadcasting in West Africa remains largely underdeveloped when compared to its full potential. An almost complete national radio coverage of the population has only been realized in a few countries, notably the Ivory Coast, Nigeria and Senegal. In those countries where television is available, it is usually confined to the major urban areas. More widespread coverage for both media is limited by the small number of transmission networks in operation and the lack of receiver sets available to the population. The over-all quality of programme production is very uneven, due principally to the lack of skilled manpower and adequate resources.

49. To help improve this situation, the 16 countries of West Africa submitted 48 projects worth approximately $68 million (1978 value) for consideration in the Phase I programme of the Decade. Twelve of these projects, dealing mostly with the construction of new production and transmission facilities, should be completed by the end of 1983. Total investment in Phase I will be about $23.6 million.

50. Progress is already being made in a number of important areas. The amount of local programming being produced and the average quality of the output have improved markedly over the last few years. For example: the Niger has recently produced locally a number of development-oriented programmes which proved extremely popular, especially in rural areas; and the Gambia has initiated regular public radio information programmes covering topics ranging from health-care to agricultural development that have a very wide listenership. There is also a clear trend towards increased use of local languages, this is especially important for reaching highly diverse and often illiterate rural audiences.

Eastern and Southern Africa

51. As a group the countries of the Eastern and Southern African sub-region submitted 37 national projects for inclusion in Phase I of the Decade. Based on 1978 cost estimates, the total value of these projects is approximately $100 million. Most of these projects concern the establishment of new production and transmission facilities. Unfortunately, only three of these projects are expected to be completed in the first phase. There are various reasons for this slow progress. First, very few of the projects have attracted financing within the Decade framework. There is also an acute shortage of skilled manpower in the subregion to undertake any of the planned new developments. These problems are now being addressed in preparation for the start of Phase II planning and implementation. Thirty-one projects from Phase I will be carried over to Phase II.

POSTAL SERVICES

52. The role of the Post in the socio-economic development of a country is now generally recognized as important and requires no elaboration. Apart from providing the basic infrastructure for the exchange of recorded information in both the public and private sectors of the economy and exchange of goods, etc., the postal network can be profitably utilized for social services, especially in rural areas as well as for the mobilization of small savings.

53. Despite the planned effort in some countries, the over-all position in the region is that postal services have not kept pace with development in other areas. The coverage of postal services is inadequate in most countries of the region, especially in areas outside the capital and a few other important cities. While each country may have special problems, the common requirements for development of postal services to meet even the basic minimum needs are:

(a) Improving the existing physical facilities, construction and equipment of new facilities to meet user needs;

(b) Establishing well-equipped sorting and transit centres at focal points to ensure speedy transmission of mail;

(c) Expansion of the rural postal network either through the automobile rural post or permanent establishments;

(d) Substantial improvements in the facility for posting of mail;

(e) Expanding the post office fleet of vehicles and improving supporting maintenance facilities, as well as encouraging private carriage of mail;

(f) Replacing worn-out equipment;

(g) Developing human resources, both at the operative and managerial levels.

54. All this calls for heavy capital investment. While postal administrations are generally alive to the problems and aware of the solutions, little is achieved due to lack of finance. By its very nature, the Post is labour-intensive requiring minimum physical infrastructure for providing services. The cost at which the service is provided is largely conditioned by social rather than commercial factors. Since returns on investment in this sector are, in the main, social and economic rather than financial, development projects are usually unable to attract adequate capital, nor are postal systems able to generate adequate surpluses for investment in developmental activity and are usually dependent on government subventions. Perhaps these are the reasons why it is accorded a low priority in the allocation of national funds for development.

55. Phase I provided an opportunity for the developmental needs of the postal sector being looked at in total communication system terms. Apart from this, it also helped in focussing attention on regional and sub-regional co-operation in important areas like transit and exchange of mail between African countries, special problems of land-locked and other disadvantaged countries; while initially 58 projects were proposed for Phase I, the number was subsequently increased to 84, after the second Conference of African Ministers of Transport, Communications and Planning, at an estimated total cost of $189.5 million. However, the progress in implementation has been slow mainly on account of difficulty in attracting adequate financing, without which no large-scale expansion of the service or improvement is possible. Only 15 projects have either been implemented or under implementation or financing secured and to be implemented soon.

56. Only one other project has attracted bilateral aid for about 10 per cent of the estimated cost and several are under negotiation with donors as at July 1982. Thus it will be seen that only 19 per cent of the total number of projects have been or are likely to be implemented, accounting for about 15 per cent of the total cost while 40 per cent of the cost of implementation has been found from internal resources of the countries concerned, bilateral assistance from the Swedish International Development Agency (SIDA) and the German Democratic Republic accounted for about 48 per cent, the balance coming from the United Nations Development Programme. Nearly 95 per cent of the bilateral aid was for a single project. This would show that the main source of other external aid has been UNDP.

57. In short it can be said that the programme of the first phase for each of the three sub-sectors as assembled by member States has been designed to achieve in the end the sectoral objectives set (see documents DEC/TRANSCOM/CM/III/1 and DEC/TRANSCOM/CM/III/3, pp.52 to 65) although it could be argued that the rate of development during the period of the first phase programme for each sub-sector was such that unless the pace was quickened the targets set for the whole period of the Decade may not be achieved.

Chapter 3. GENERAL PRESENTATION OF THE SECOND PHASE PROGRAMME

58. The first draft of the programme of the second phase presented to the Conference of Ministers in Cairo contained altogether 628 projects for the communications sector. Of these, 375 were new projects and 253 projects transferred from the first phase programme.

59. The Conference, in reviewing the first draft of the second phase programme laid down the following guidelines for the preparation of the second draft of the programme:

(a) Ongoing projects should be continued and included in the programme of the second phase;

(b) Projects on which feasibility studies have been made and which are included in the national plans and are of relevance to the global objectives should be included in the programme;

(c) Projects on which no feasibility studies have been made should generally be excluded; care should nevertheless be taken to ensure that projects of relevance to the global objectives are not systematically excluded;

(d) A project not included in the national plan of the country submitting it should be excluded from the programme;

(e) Projects still at the conception stage should be excluded;

(f) Strong emphasis should be placed on regional and subregional projects and national projects of land-locked countries;

(g) There must be an effective co-ordination and integration of the various modes of transport;

(h) Strong emphasis should be placed on maintenance and on the preservation of existing assets;

(i) There should be a clear indication of the extent of local and foreign financing.

60. Following revisions from some member countries that were submitted in response to resolution ECA/UNTACDA/Res.83/23 as well as the recommendations of the Paris Roundtable, and subsequent amendment on the second draft of the second phase programme submitted at the fourth Conference of African Ministers of Transport, Communications and Planning, Conakry, 7 to 11 February 1984, the draft programme presented by ECA and the Inter-agency Co-ordinating Committee for the Decade as alternative to the second draft was adopted with the said amendments by the fourth Conference of Ministers.

61. For the communications sector the second phase programme is made up of 472 projects broken down by sub-sector and in terms of cost as shown in table 2. The total cost of the sector programme is $3.93 billion, of which 46 per cent has either been secured, committed or locally earmarked, leaving a balance of $2.11 billion to be sought.

62. The projects of the programme are grouped by nature: there are five groups as follows:

(a) Rehabilitation and maintenance;

(b) Training;

(c) Technical assistance;

(d) Other regional projects; and

(e) Other national projects.

The grouping by nature does not follow rigidly the approved prioritization system laid down in the Global Strategy. Insofar as a project, be it regional or purely national and without subregional implications meets a declared and immediate maintenance and rehabilitation need, it is so classified. This holds equally for projects with training and technical assistance elements: they are classified as training and technical assistance projects. Other projects which do not satisfy these class definitions are grouped or classified as "other regional, subregional, national with subregional impact" or as "other national" projects.

63. Annexes 1, 2 and 3 give the projects in the groups rehabilitation and maintenance; training; and technical assistance; other regional, subregional and national projects with subregional impact and other national projects are presented in annexes 4 and 5 respectively for each of the sub-sectors.

64. From table 3 which summarizes the details of the programme by sub-sector and project grouping may be seen that the second phase programme for the communications sector consists in the main of telecommunications projects and that for each sub-sector national projects dominate. Regional projects constitute a little over 17 per cent by cost and 20 per cent by number of the total programme package.

65. In the telecommunications, broadcasting and postal sub-sectors, rehabilitation and maintenance projects as well as training projects are not as strongly featured as might be expected in view of the need for initiating and maintaining an adequate level of operational efficiency in existing services and for preserving existing assets.

66. The structure of the programme is reflected in table 4 from which it may be noted that one country's share of the telecommunications sub-sector programme total is 50.1 per cent. This may give the semblance of unreality to the programme; however the country concerned (Nigeria) is self-financing all its projects. A similar uneven distribution of projects for the broadcasting sub-sector is indicated; and again one country's programme (Cameroon) constitutes 43.6 per cent of the total cost of the sub-sector's programme. In the postal sub-sector the imbalance is less severe : one country's share of the programme is 15.3 per cent in cost terms.

67. Tables 5, 6 and 7 for telecommunications, broadcasting and postal respectively indicate the number and total cost of projects presented by each country for each of the five groupings of the communications sector programme. Altogether 37 countries presented 216 projects for the telecommunications sub-sector, 35 countries presented 121 projects for the broadcasting sub-sector and 39 countries presented 135 projects for the postal sub-sector.

Table 2. Communications sector: Second Phase Programme

Cost summary

(Cost in millions of dollars)

Sub-sector	Number of projects	Total Cost	Financing secured/ committed/locally earmarked	Financing to be sought	Percentage financing secured/committed locally earmarked
TEP	216	2692.20	1579.45	1112.75	59
BRP	121	715.57	146.45	569.12	20
POP	135	522.95	94.29	428.66	18
Total	472	3930.72	1820.19	2110.53	46

Table 3. Summary details by sub-sector and project grouping

A: Number of projects
B: Cost in millions of dollars

Project category	Subsector TEP		BRP		POP		Total		Percentage of total cost
	A	B	A	B	A	B	A	B	
Rehabilitation and maintenance	15	100.15	8	24.73	3	4.34	26	129.22	3.3
Technical assistance	5	9.64	9	18.96	10	5.11	24	33.71	0.9
Training	22	164.79	14	33.52	16	46.06	52	244.37	6.2
Other regional	75	505.30	3	2.54	17	168.05	95	675.89	17.2
Other national	99	1912.32	87	635.82	89	299.39	275	2847.53	72.4
Total	216	2692.20	121	715.57	135	522.95	472	3930.72	100.0

Table 4. Structure of the communications sector programme

Cost in millions of dollars

Range of costs	Number of countries			Total cost of projects			Average cost per country			Percentage of programme total		
	TEP	BRP	POP	TEP	BRP	POP	TEP	BRP	POP	TEP	BRP	POP
Below 20	20	27	29	211.31	167.92	158.80	10.56	6.22	5.48	7.9	23.7	30.4
20-49	10	6	9	362.14	153.72	246.41	32.61	25.62	27.38	13.5	21.5	47.1
50-99	6	1	1	385.92	59.60	80.00	64.32	59.60	80.00	14.3	8.3	15.3
100-999	-	1	-	-	312.15	-	-	312.15	-	-	43.6	-
Above 1000	1	-	-	1349.83	-	-	1349.83	-	-	50.1	-	-
		ALL REGIONAL		383.00	22.18	37.76	7.66	0.44	0.76	14.2	3.1	7.2
	37	35	39	2692.20	715.57	522.97	72.76 a/	20.45 a/	12.95 a/	100	100	100

a/ Excluding "All regional" projects.

Table 5. Number and cost of projects by nature and by country: Telecommunications sub-sector

A = Number of projects
B = Cost in millions of dollars

Code	Country	Nature of project: Rehabilitation and maintenance A	Rehabilitation and maintenance B	Technical assistance A	Technical assistance B	Training A	Training B	Other regional A	Other regional B	Other national A	Other national B	Total A	Total B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
01	Algeria	-	-	-	-	-	-	1	4.50	1	10.0	1	14.50
02	Angola	-	-	-	-	-	-	-	-	-	-	-	-
03	Benin	-	-	-	-	-	-	-	-	-	-	-	-
04	Botswana	-	-	-	-	-	-	-	-	-	-	-	-
05	Burundi	-	-	-	-	-	-	2	0.22	6	14.8	8	15.02
06	Cameroon	1	0.83	-	-	-	-	1	1.60	5	38.13	7	40.56
07	Cape Verde	-	-	-	-	-	-	-	-	1	4.50	1	4.50
08	Central African Rep.	3	3.90	-	-	-	-	1	1.50	1	13.30	5	18.70
09	Chad	1	0.83	-	-	-	-	1	8.33	2	50.34	4	59.50
10	Comoros	-	-	-	-	-	-	1	4.00	2	8.70	3	12.70
11	Congo	1	12.20	-	-	-	-	3	15.82	2	9.74	6	37.66
12	Djibouti	-	-	-	-	-	-	1	8.00	2	4.60	3	12.60
13	Egypt	-	-	-	-	-	-	1	20.00	-	-	1	20.00
14	Equatorial Guinea	1	0.36	-	-	-	-	2	8.18	-	-	3	8.54
15	Ethiopia	-	-	-	-	-	-	2	2.80	5	5.64	7	8.44
16	Gabon	-	-	-	-	-	-	1	12.10	2	31.00	3	43.10
17	Gambia	-	-	-	-	-	-	-	-	4	18.28	4	18.28
18	Ghana	1	3.65	-	-	1	3.34	3	36.52	-	-	5	70.91
19	Guinea	1	5.00	-	-	-	-	2	6.00	5	78.20	8	89.20
20	Guinea-Bissau	-	-	-	-	-	-	-	-	-	-	-	-
21	Ivory Coast	-	-	-	-	-	-	-	-	-	-	-	-
22	Kenya	-	-	-	-	-	-	-	-	1	5.90	1	5.90
23	Lesotho	-	-	-	-	-	-	-	-	-	-	-	-
24	Liberia	-	-	-	-	-	-	3	24.83	1	5.30	4	28.13
25	Libyan Arab Jamahiriya	-	-	-	-	-	-	-	-	-	-	-	-

Table 5 (cont'd)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
26	Madagascar	-	-	-	-	-	-	-	-	-	-	-	-
27	Malawi	-	-	-	-	-	-	-	-	6	59.61	6	59.61
28	Mali	-	-	-	-	-	-	-	-	-	-	-	-
29	Mauritania	-	-	-	-	-	-	-	-	1	24.00	1	24.00
30	Mauritius	-	-	-	-	1	0.80	-	-	-	-	1	0.80
31	Morocco	-	-	-	-	-	-	1	3.00	2	47.20	3	50.20
32	Mozambique	-	-	-	-	-	-	-	-	-	-	-	-
33	Niger	-	-	-	-	-	-	-	-	1	3.66	1	3.66
34	Nigeria	-	-	-	-	-	-	5	42.55	8	1,307.28	13	1,349.83
35	Rwanda	-	-	-	-	-	-	3	1.86	3	14.89	6	16.75
36	Sao Tome & Principe	-	-	-	-	-	-	-	-	3	2.65	3	2.65
37	Senegal	-	-	-	-	-	-	4	6.60	3	43.14	7	49.74
38	Seychelles	-	-	-	-	-	-	-	-	-	-	-	-
39	Sierra Leone	-	-	-	-	-	-	1	6.00	7	27.23	8	33.23
40	Somalia	-	-	-	-	-	-	-	-	-	-	-	-
41	Sudan	1	17.00	-	-	-	-	4	12.00	2	9.50	7	38.50
42	Swaziland	-	-	-	-	-	-	1	4.32	4	10.37	5	14.69
43	United Republic of Tanzania	-	-	-	-	-	-	4	1.23	-	-	4	1.23
44	Togo	-	-	-	-	-	-	3	5.30	10	41.92	13	47.22
45	Tunisia	-	-	-	-	-	-	-	-	-	-	-	-
46	Uganda	-	-	-	-	-	-	-	-	3	17.94	3	17.94
47	Upper Volta	-	-	-	-	-	-	1	0.91	5	4.61	6	5.52
48	Zaire	4	56.50	-	-	-	-	-	-	-	-	4	56.50
49	Zambia	-	-	-	-	-	-	1	14.40	1	1.89	2	16.29
50	Zimbabwe	-	-	-	-	-	-	1	12.60	-	-	1	12.60
60	Regional	1	0.58	5	9.64	20	132.65	21	240.13	-	-	47	383.00
	Total	15	100.15	5	9.64	22	164.79	75	505.30	99	1912.32	216	2692.30

Table 6. Number and cost of projects by nature and by country: Broadcasting sub-sector

A = Number of projects
B = Cost in millions of dollars

Code	Country	Nature of project: Rehabilitation and maintenance A	Rehabilitation and maintenance B	Technical assistance A	Technical assistance B	Training A	Training B	Other regional A	Other regional B	Other national A	Other national B	Total A	Total B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
01	Algeria	-	-	-	-	-	-	-	-	-	-	-	-
02	Angola	-	-	-	-	-	-	-	-	-	-	-	-
03	Benin	-	-	-	-	-	-	-	-	3	21.20	3	21.20
04	Botswana	-	-	-	-	-	-	-	-	3	3.04	3	3.04
05	Burundi	-	-	-	-	-	-	-	-	2	6.40	2	6.40
06	Cameroon	-	-	-	-	-	-	-	-	8	312.15	8	312.15
07	Cape Verde	1	0.20	-	-	-	-	-	-	4	2.70	5	2.90
08	Central African Rep.	-	-	-	-	-	-	-	-	3	2.53	3	2.53
09	Chad	1	6.26	-	-	-	-	-	-	4	3.90	5	10.16
10	Comoros	-	-	1	0.04	1	0.07	-	-	-	-	2	0.11
11	Congo	-	-	-	-	-	-	-	-	1	18.20	1	18.20
12	Djibouti	-	-	-	-	-	-	-	-	1	2.54	1	2.54
13	Egypt	-	-	-	-	1	6.00	-	-	1	3.00	2	9.00
14	Equatorial Guinea	-	-	-	-	-	-	-	-	2	3.90	2	3.90
15	Ethiopia	-	-	-	-	-	-	-	-	2	6.00	2	6.00
16	Gabon	-	-	-	-	-	-	-	-	-	-	-	-
17	Gambia	-	-	-	-	-	-	-	-	3	1.90	3	1.90
18	Ghana	2	1.26	-	-	1	18.91	-	-	-	-	3	20.17
19	Guinea	-	-	-	-	1	0.24	-	-	3	5.94	4	6.18
20	Guinea-Bissau	-	-	-	-	-	-	-	-	-	-	-	-
21	Ivory Coast	-	-	-	-	-	-	-	-	-	-	-	-
22	Kenya	-	-	-	-	1	0.28	-	-	3	39.21	4	39.49
23	Lesotho	-	-	-	-	-	-	-	-	-	-	-	-
24	Liberia	-	-	-	-	-	-	-	-	1	13.00	1	13.00
25	Libyan Arab Jamahiriya	-	-	-	-	-	-	-	-	-	-	-	-

Table 6 (cont'd)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
26	Madagascar	-	-	-	-	1	0.05	-	-	1	0.25	2	0.30
27	Malawi	-	-	-	-	1	0.45	-	-	-	-	1	0.45
28	Mali	1	0.36	-	-	-	-	-	-	2	4.30	3	4.66
29	Mauritania	-	-	-	-	1	1.80	-	-	5	12.49	6	14.29
30	Mauritius	-	-	-	-	-	-	-	-	-	-	-	-
31	Morocco	-	-	-	-	-	-	-	-	-	-	-	-
32	Mozambique	-	-	-	-	-	-	-	-	-	-	-	-
33	Niger	-	-	-	-	-	-	-	-	1	0.23	1	0.23
34	Nigeria	-	-	-	-	-	-	-	-	-	-	-	-
35	Rwanda	-	-	-	-	1	...	-	-	7	4.84	8	4.84
36	Sao Tome & Principe	-	-	-	-	-	-	-	-	1	0.24	1	0.24
37	Senegal	-	-	-	-	-	-	-	-	-	-	-	-
38	Seychelles	-	-	-	-	-	-	-	-	-	-	-	-
39	Sierra Leone	-	-	-	-	-	-	-	-	2	13.27	2	13.27
40	Somalia	-	-	-	-	-	-	-	-	1	2.40	1	2.40
41	Sudan	-	-	-	-	-	-	-	-	-	-	-	-
42	Swaziland	-	-	-	-	-	-	-	-	-	-	-	-
43	United Republic of Tanzania	-	-	-	-	-	-	-	-	5	10.16	5	10.16
44	Togo	-	-	-	-	-	-	-	-	3	9.70	3	9.70
45	Tunisia	-	-	-	-	-	-	-	-	3	59.60	3	59.60
46	Uganda	3	16.65	-	-	1	1.75	-	-	1	1.81	5	20.21
47	Upper Volta	-	-	-	-	-	-	-	-	4	19.02	4	19.02
48	Zaire	-	-	-	-	-	-	-	-	2	22.05	2	22.05
49	Zambia	-	-	-	-	1	0.75	-	-	5	29.85	6	30.60
50	Zimbabwe	-	-	-	-	2	2.50	-	-	-	-	2	2.50
60	Regional	-	-	8	18.92	1	0.72	3	2.54	-	-	12	22.18
	Total	8	24.73	9	18.96	14	33.52	3	2.54	87	635.82	121	715.57

Table 7. Number and cost of projects by nature and by country: Postal sub-sector

A = Number of projects
B = Cost in millions of dollars

Code	Country	Nature of project: Rehabilitation and maintenance		Technical assistance		Training		Other regional		Other national		Total	
		A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
01	Algeria	-	-	-	-	-	-	-	-	-	-	-	-
02	Angola	-	-	-	-	-	-	-	-	-	-	-	-
03	Benin	-	-	-	-	-	-	1	2.15	1	1.58	2	3.74
04	Botswana	-	-	1	0.18	-	-	-	-	1	0.22	2	0.40
05	Burundi	-	-	-	-	-	-	-	-	3	1.67	3	1.67
06	Cameroon	-	-	-	-	-	-	1	21.84	4	20.19	5	42.03
07	Cape Verde	-	-	-	-	-	-	-	-	-	-	-	-
08	Central African Rep.	-	-	-	-	1	1.01	-	-	7	12.23	8	13.24
09	Chad	-	-	-	-	-	-	-	-	3	2.23	3	2.23
10	Comores	-	-	-	-	1	0.52	-	-	4	5.62	5	6.14
11	Congo	1	1.45	-	-	1	3.50	1	13.89	5	2.36	8	21.20
12	Djibouti	-	-	-	-	1	0.37	-	-	-	-	1	0.37
13	Egypt	-	-	-	-	-	-	-	-	1	4.50	1	4.50
14	Equatorial Guinea	1	0.25	1	0.05	-	-	-	-	2	0.42	4	0.72
15	Ethiopia	-	-	-	-	-	-	-	-	1	8.32	1	8.32
16	Gabon	-	-	-	-	-	-	-	-	2	30.00	2	30.00
17	Gambia	-	-	-	-	-	-	-	-	3	1.55	3	1.55
18	Ghana	-	-	-	-	-	-	1	22.00	-	-	1	22.00
19	Guinea	-	-	-	-	-	-	-	-	2	30.66	2	30.66
20	Guinea-Bissau	-	-	-	-	1	0.65	-	-	3	1.43	4	2.08
21	Ivory Coast	-	-	-	-	-	-	2	10.00	1	2.50	3	12.50
22	Kenya	-	-	-	-	-	-	-	-	-	-	-	-
23	Lesotho	-	-	-	-	-	-	-	-	-	-	-	-
24	Liberia	-	-	-	-	-	-	-	-	1	3.01	1	3.01
25	Libyan Arab Jamahiriya	-	-	-	-	-	-	-	-	-	-	-	-

Table 7 (cont'd)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
26	Madagascar	-	-	-	-	1	0.02	1	21.84	2	1.99	4	23.85
27	Malawi	-	-	-	-	-	-	-	-	2	3.50	2	3.50
28	Mali	-	-	-	-	-	-	1	7.00	2	0.95	3	7.95
29	Mauritania	-	-	-	-	-	-	-	-	-	-	-	-
30	Mauritius	-	-	-	-	-	-	-	-	1	0.93	1	0.93
31	Morocco	-	-	-	-	-	-	2	8.60	-	-	2	8.60
32	Mozambique	-	-	-	-	1	4.00	1	10.00	2	11.00	4	25.00
33	Niger	-	-	-	-	-	-	-	-	3	5.30	3	5.30
34	Nigeria	-	-	-	-	1	23.60	-	-	3	56.40	4	80.00
35	Rwanda	-	-	-	-	1	0.30	-	-	4	12.81	5	13.11
36	Sao Tome & Principe	-	-	-	-	-	-	-	-	3	0.16	3	0.16
37	Senegal	-	-	-	-	-	-	1	10.00	-	-	1	10.00
38	Seychelles	-	-	-	-	-	-	-	-	-	-	-	-
39	Sierra Leone	-	-	-	-	-	-	-	-	1	3.68	1	3.68
40	Somalia	-	-	-	-	-	-	-	-	-	-	-	-
41	Sudan	-	-	-	-	-	-	-	-	1	4.00	1	4.00
42	Swaziland	-	-	-	-	1	1.80	-	-	4	1.67	5	3.47
43	United Republic of Tanzania	-	-	-	-	-	-	1	13.00	-	-	1	13.00
44	Togo	-	-	-	-	1	3.20	-	-	6	20.12	7	23.32
45	Tunisia	-	-	-	-	-	-	-	-	-	-	-	-
46	Uganda	-	-	-	-	-	-	-	-	-	-	-	-
47	Upper Volta	1	2.64	-	-	-	-	-	-	2	5.70	3	8.34
48	Zaire	-	-	2	0.45	-	-	-	-	5	27.90	7	28.35
49	Zambia	-	-	-	-	-	-	-	-	2	2.60	2	2.60
50	Zimbabwe	-	-	-	-	1	1.50	-	-	2	12.20	3	13.70
60	Regional	-	-	6	4.43	4	5.60	4	27.73	-	-	14	37.76
	Total	3	4.34	10	5.11	16	46.07	17	168.05	89	299.40	135	522.97

Table 8. Cost estimates by country in relation to GDP (in millions of dollars)

Code	Country	Cost estimates TEP (a)	BRP (b)	POP (c)	Total (a)+(b)+(c)	Financing obtained Local earmarked	External secured or committed	GDP (1981)	One-fifth of planned investment per GDP (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
01	Algeria	14.50	...	...	14.50	...	...	30,440.90	0.01
02	Angola	...	...	...	...	...	...	...	...
03	Benin	...	21.20	3.74	24.94	0.37	0.10	795.36	0.63
04	Botswana	...	3.04	0.40	3.44	...	...	852.26	0.08
05	Burundi	15.02	6.40	1.67	23.09	...	...	884.32	0.52
06	Cameroon	40.56	312.15	42.30	394.74	68.70	85.83	5,354.25	1.47
07	Cape Verde	4.50	2.90	...	7.40	...	0.66	90.05	1.64
08	Central African Rep.	18.70	2.53	13.24	34.47	2.59	0.50	536.37	1.29
09	Chad	59.50	10.16	2.23	71.89	...	...	773.42	1.86
10	Comoros	12.70	0.11	6.14	18.95	...	...	106.00	3.58
11	Congo	37.66	18.20	21.19	77.05	21.47	0.30	995.54	1.55
12	Djibouti	12.60	2.54	0.37	15.51	1.50	...	310.82	0.99
13	Egypt	20.00	9.00	4.50	33.50	1.62	...	23,688.57	0.03
14	Equatorial Guinea	8.54	3.90	0.72	13.16	...	...	24.04	10.95
15	Ethiopia	8.44	6.00	8.32	22.76	0.50	...	4,316.91	0.11
16	Gabon	43.10	...	30.00	73.10	...	...	2,826.68	0.52
17	Gambia	18.28	1.90	1.55	21.73	0.55	17.78	198.10	2.19
18	Ghana	70.91	20.17	22.00	113.08	39.46	26.00	6,076.48	0.37
19	Guinea	89.20	6.18	30.66	126.04	24.08	...	1,600.17	1.58
20	Guinea-Bissau	...	...	2.08	2.08	...	...	141.26	0.29
21	Ivory Coast	...	...	12.50	12.50	...	...	6,967.34	0.04
22	Kenya	5.90	39.49	...	45.39	0.75	...	5,768.01	0.16
23	Lesotho	...	...	...	...	...	...	...	...
24	Liberia	28.18	13.00	3.01	44.14	...	...	1,268.00	0.78
25	Libyan Arab Jamahiriya	...	...	...	...	...	...	...	...

Table 8 (cont'd)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
26	Madagascar	...	0.30	23.85	24.15	...	...	2,741.86	0.18
27	Malawi	59.61	0.45	3.50	63.56	2.09	...	1,418.52	0.89
28	Mali	...	4.66	7.95	12.61	...	...	1,244.39	0.20
29	Mauritania	24.00	14.29	...	...	38.29	10.00	720.60	1.06
30	Mauritius	0.80	...	0.93	1.73	...	...	974.46	0.04
31	Morocco	50.20	...	8.60	58.80	29.26	...	12,623.76	0.09
32	Mozambique	...	...	25.00	25.00	...	...	5,124.74	0.09
33	Niger	3.66	0.23	5.29	9.18	0.50	...	1,784.43	0.10
34	Nigeria	1,389.83	...	80.00	1,429.83	1,429.83	...	71,393.36	0.40
35	Rwanda	16.75	4.84	13.11	34.70	1.53	1.86	1,133.32	0.61
36	Sao Tome & Principe	2.65	0.24	0.16	3.05	0.56	...	39.76	1.53
37	Senegal	49.74	...	10.00	59.74	1.69	...	2,042.03	0.59
38	Seychelles	...	...	...	...	...	...	131.70	...
39	Sierra Leone	33.23	13.27	3.68	50.18	3.47	...	1,246.19	0.81
40	Somalia	...	2.40	...	2.40	...	...	1,780.14	0.03
41	Sudan	38.50	...	4.00	42.50	...	...	8,905.34	0.10
42	Swaziland	14.69	...	3.47	18.16	1.52	...	457.66	0.79
43	United Republic of Tanzania	1.23	10.16	13.00	24.39	3.39	1.04	4,476.56	0.11
44	Togo	47.22	9.70	23.32	80.24	0.60	...	972.26	1.65
45	Tunisia	...	59.60	...	59.60	...	...	6,354.90	0.19
46	Uganda	17.94	20.21	...	38.15	2.44	2.30	6,454.55	0.12
47	Upper Volta	5.52	19.02	8.34	32.88	0.45	...	898.27	0.73
48	Zaire	56.50	22.05	28.35	106.90	0.05	7.00	4,628.77	0.46
49	Zambia	16.29	30.60	2.60	49.49	...	...	3,066.85	0.32
50	Zimbabwe	12.60	2.50	13.70	28.80	...	...	4,697.55	0.12
60	Regional	383.00	22.18	37.76	442.94	0.12	27.75	...	...
	Total	2,629.20	715.98	522.96	3,931.13	1,639.09	181.10	239,326.82 a/	(0.29)

a/ For the 46 countries involved with the programme.

Chapter 4. SUB-SECTORAL ANALYSIS

A. TELECOMMUNICATIONS

68. The programme for the first phase of the Decade (1980-1983) consisted of 90 telecommunications projects. Forty-eight were priority I projects that is they were regional, subregional or national with subregional impact, addressing common needs such as construction of international communication links (including TEP-01, the all-embracing PANAFTEL Network construction project), the establishment of regional manpower training centres and the study on the establishment of a regional African satellite communications system. The remaining 42 projects were submitted by national governments for the improvement and/or extension of domestic telecommunication capabilities. These projects focussed mainly on the purchase and installation of new network and exchange equipment; some attention was also paid to the provision of training facilities and general manpower development.

69. The total value of all telecommunication projects submitted in the first phase programme was $531 million (1978 estimates). Seventeen per cent or 15 projects of the first phase programme have been implemented. The remaining 83 per cent or 75 projects were transferred to the second phase programme.

70. The second phase programme consists of 216 projects including the 75 projects from the first phase. These projects have been submitted by 37 member countries and a number of international organizations and are valued at $2,692.20 million based mostly on 1981 project cost estimates.

Project groupings

71. In order to facilitate investment decisions by donors which may have special interest in the telecommunication programme, the projects have been classified into five groups as follows: rehabilitation and maintenance (annex 1); training (annex 2); technical assistance (annex 3); other regional, subregional and national projects with regional impact (annex 4); and other national projects (annex 5).

72. These projects have satisfied the approved priorities set out in the Global Strategy, the guidelines laid down by the third Conference of African Ministers of Transport, Communications and Planning for the revision of the first draft of the second phase programme and the recommendations of the Paris Roundtable.

(a) Rehabilitation and maintenance

73. During the past 20 years African countries have made remarkable efforts to expand their national telecommunication networks through new construction projects; however, maintenance and rehabilitation were not given the same priority. During the second phase higher priority is being assigned to rehabilitation and maintenance for preserving existing infrastructures. Fifteen projects valued at $100.15 million or 7 per cent of the total number of projects and 3.7 per cent of the total cost have been identified under this grouping. These projects are generally for rehabilitation, improvement and extension of domestic telecommunication networks. If these projects are implemented they will assist in attaining the target of a telephone density of one per hundred inhabitants (1/100) and one public booth per 10,000 rural inhabitants, uniformly distributed so that each inhabitant might be within 5 km of an installation.

(b) Training

74. The manpower training and development position in telecommunications which was reviewed by ECA in 1972 has not changed much as the Decade's manpower training programme enters the second phase, 10 years later. According to the review (January 1973), Africa had been investing $80 million yearly in the telecommunications subsector; but during the period there was no commensurate investment in manpower training and development. Only 40 per cent of national telecommunication organizations have vocational training centres or national training institutes for formal training in communication techniques. Subregional institutes which are expected to offer medium-level and some higher-level training suffer from inadequacy of capacity and facilities, as well as from under-staffing and/or staffing with insufficiently trained instructors, with obvious effects on training standards. Professional engineers formed only 3-4 per cent of the engineering staff of national telecommunication organizations. Senior engineers and management personnel constituted 7 per cent of the total staff as against 12 per cent in developing countries of the other regions of the world. Practically all the staff (planning, construction, maintenance, operational and training), including technicians, require further training to keep up with the rate of technological development in communications. This picture has not changed much since 1973, and constitutes the problem which the Decade's manpower training programme sets out to solve. Twenty-two projects or 10.2 per cent of the total projects valued at $164.79 million or 6.1 per cent of total cost of the telecommunication programme have been identified.

75. These projects consist of follow-up of manpower and training needs of member countries, strengthening of existing institutions by offering management courses for middle management personnel, establishment of regional and multinational training centres for basic, medium- and high-level manpower development in the region, seminars for rural telecommunications, workshops and courses on communication by satellite and the establishment of a regional school for satellite communications.

76. The full implementation of these projects would ensure the immediate and long-term supply of specific categories of manpower at all levels for self-reliant development and efficient rehabilitation and maintenance beyond the end of the Decade period and especially in the context of the proposed regional African satellite communication system, PANAFTEL and expected development in modern communication technologies.

(c) Technical assistance

77. In the second phase, it is envisaged that certain projects such as development planning of telecommunication systems and services, and management and administration of telecommunication organizations require technical assistance to help carry out special studies before implementation. Five projects of this nature have been included as part of the technical assistance programme valued at $9.64 million or 2.3 per cent of the total number of projects and 0.4 per cent of the total cost. All five of these projects are regional by classification, but very similar to those under training. If implemented these projects would play an important role in the integration of intra-African modern communication networks as well as in the development of national communication networks.

(d) Regional, subregional and national projects with subregional impact

78. There are 75 regional, subregional and national projects with sub-regional impact valued at $505.30 million or 34.7 per cent of the total number of projects and 18.8 per cent of the total cost. Most of these projects have been transferred from Phase I because of their nature and contribution towards the objective set out in the Global Strategy, that is, standardization of equipment, co-ordination of operating regulations and establishment of effective intra-regional communication links.

79. With regard to the integration of intra-African communication network, the ongoing PANAFTEL Network project continues to be the most important single regional project under implementation. As it is being implemented, the PANAFTEL Network is basically a terrestrial system which cannot on its own merit meet the growing communication needs of the region. To supplement the speedy integration of the region's communication networks and the development of domestic communication networks, a regional African satellite communication system, the second largest project,has been proposed. The feasibility study is to be undertaken during the second phase. The implementation of these two projects along with their national components and other projects under this grouping would improve and enhance the development of the region's communication networks immensely.

(e) Other national projects

80. There are 99 national projects valued at $1,912.32 million or 46 per cent of the total number of projects submitted by national governments and 71 per cent of the total cost. One country's share is 50 per cent of the total value of the national projects.

81. These projects are mainly for improvement and/or extension of domestic telecommunication capabilities. They involve the purchase and installation of new networks, particularly in the rural areas, and exchange equipment. These projects are closely related to those mentioned under the other groupings. Their implementation could assist in the integration of member countries' networks into the regional communication system as well as the development of their national networks.

B. BROADCASTING

General

82. In the broadcasting subsector 121 projects at a total estimated cost of $716 million are listed. Of this amount, $143 million or 20 per cent has been secured and $573 million or 80 per cent remains to be found.

83. The broadcasting programme accounts for 18.2 per cent of the total programme for the communications sector.

84. Data on the numbers of projects, total cost, financing secured and financing required are presented in table 2. Project data have been arranged according to nature (rehabilitation and maintenance, technical assistance, etc.) and according to subsector including broadcasting in annexes 1 to 5.

85. The lion's share of the programme, 87 projects, is included under national projects, at a total cost of some $636 million or 88.8 per cent.

86. The remaining 11.2 per cent of this subsector's total cost is shared among the other four groupings. Rehabilitation and maintenance is somewhat under-represented with eight projects. It must be questioned whether the figures presented reflect the actual situation.

87. Under training,14 projects are listed at a total estimated cost of $34 million or roughly 5 per cent of the broadcasting programme total, which should be the minimum allocated to the training function. Considering the dim funding prospects of any training project it is suggested that these training projects should receive special attention from donor agencies.

(a) Rehabilitation and maintenance

88. There are eight projects submitted by five countries field under rehabilitation and maintenance. The total estimated cost of these projects is $25 million, $22 million of which is still to be found. The substance of these projects refers to replacement of equipment which either has become obsolete and is therefore cut off from supply of spares or has been damaged by looting or direct war action. Spare parts for rehabilitation of existing plant and test equipment for improving maintenance are also frequent items included in the project profiles.

(b) Training

89. For broadcasting, 14 projects are included under training. Twelve countries have submitted such projects amounting to a total estimated cost of $34 million. Funding has to be sought for all projects with the exception of a minor earmarking for one project.

90. Most of the training projects refer to upgrading of existing institutions. Main items include services of lecturers, fellowships and training equipment. Software aspects like programme production have also been included in these training projects.

(c) Technical assistance

91. Under technical assistance, nine projects at a total estimated cost of $19 million are included. All but one of these projects have been submitted by international or regional organizations. Only a small amount (some $0.6 million) has been secured for funding; the remaining $18.4 million has still to be found. Most projects in this category are designed to develop know-how in such fields as news agencies, planning, production and exchange of programmes as well as management of broadcasting services.

(d) Regional, subregional and national projects with subregional impact

92. Only three projects are included under this grouping. Some projects with regional character are already listed under "Training" (Annex 2) or "Technical assistance" (Annex 3). The total estimated cost of these projects is $2.5 million for which no funding has been obtained to date. All projects have been submitted by international or regional organizations.

(e) Other national projects

93. Eighty-seven projects out of 121, the majority of all broadcasting projects, are listed under this grouping. The total estimated cost of these projects is $636 million. Considerable funding to the tune of $140 million has been secured, but some $496 million remains to be found.

94. A single project concerning a complete colour TV network amounts to $187 million alone. This project has received considerable financing. It is however not typical for the programme and to some extent distorts the analysis.

95. A rough analysis of the national projects shows the following trends:

(a) The majority of the projects deal with the improvement of sound broadcasting, transmitters as well as programme production facilities (studios);

(b) About a third of the projects are wholly or partly related to TV;

(c) Among the projects with the highest cost figures are high-power transmitters (MF, HF), TV networks, FM-broadcast networks and big studio complexes for broadcasting and television;

(d) Projects connected with news agencies and industrial production plants feature less frequently.

C. POSTAL SERVICES

96. The programme of the first phase of the Decade (1980-1983) comprised 84 postal projects amounting to a total of $241.55 million. Eighteen projects were concerned with regional activities, such as the establishment of transit centres for improving mail routing, training, the study of postal services in rural areas, the operation of savings banks, etc.; the other projects were mainly concerned with the setting up of postal infrastructure, purchase of equipment for rural mobile postal services and other postal operations.

97. Sixteen projects (19 per cent) were completed during the first phase and the total amount invested was about $36 million. Other projects were either modified, or integrated with new projects, or abandoned after study. Thus, 63 projects were carried over into the programme of the second phase.

98. The programme of the second phase comprises a total of 135 projects presented by 39 countries and four regional or subregional organizations.

Classification of projects

99. In order to make it possible to identify projects according to their nature and degree of priority, these projects were classified into the five categories below:

- Rehabilitation and maintenance projects
- Training projects

- Technical assistance projects
- Regional, subregional and national projects with subregional impact
- Other national projects

100. This classification takes into account the guidelines of the Conference of African Ministers of Transport, Communications and Planning which was held in Cairo in 1983, as well as the recommendations of the Paris Roundtable (21-24 June 1984).

101. The programme of the second phase shows that in the postal services sector, the 135 projects selected are estimated to cost a total of $522.96 million. The breakdown is as follows:

(a) Three rehabilitation and maintenance projects (2.22 per cent of the total number);

(b) 16 training projects (11.85 per cent);

(c) 10 technical assistance projects (7.41 per cent);

(d) 17 regional, subregional and national projects with subregional impact (12.59 per cent);

(e) 89 other national projects (65.93 per cent).

102. The total cost of these projects, estimated at $522.96 million, is distributed as follows:

(a) Rehabilitation and maintenance: $4.34 million (0.83 per cent of the total;

(b) Training: $46.06 million (8.81 per cent);

(c) Technical assistance: $5.11 million (0.98 per cent);

(d) Regional, subregional and national projects with subregional impact: $168.05 million (32.13 per cent)

(e) Other national projects: $299.40 million (57.25 per cent)

103. Although most of the training and technical assistance projects are subregional projects, it was considered useful to classify them in distinct groupings in order to clearly reflect the importance accorded to these projects by member States in formulating their national development programmes.

(a) Rehabilitation and maintenance

104. One of the sectoral objectives contained in the Global Strategy for the Decade is the maintenance and efficient operation of the existing postal services and networks. The rehabilitation and maintenance programme for the postal sub-sector is mainly concerned with reconstruction and modernization of the existing infrastructure the general improvement of networks and renewal of equipment.

105. The objective set by the United Nations Third Development Decade in respect of postal services is one post office for every 3,000 to 6,000 people or an area of 20 to 40 km2. At the present time, in Africa, a post office serves about 27,500 inhabitants and an area of about 2,200 km^2. It therefore seems clear that the objective recommended will not be attained during the United Nations Transport and Communications Decade in Africa.

106. The small number of rehabilitation and maintenance projects listed does not make for regular maintenance and renewal of existing infrastructures and will only serve to aggrevate the problems of postal services in the region. Rehabilitation and maintenance projects included in the programme of the second phase only represent 2.22 per cent of the total number of projects and 0.83 per cent of the total cost of postal projects.

(b) Training and (c) Technical assistance

107. One of the recognized causes of poor quality postal services in Africa is the absence of vocational training for postal services staff; this is why one of the objectives set by the Decade is that each country should possess its own training school for operational and supervisory staff and that multinational schools be set up for French-speaking, English-speaking and Portugese-speaking postal services staff to meet the requirements for medium- and high-level manpower in Africa. In the same vein, advanced training courses and specialist courses should be organized since they are of utmost importance for Africa. Sixteen training projects and 10 technical assistance projects are included under this grouping. The inclusion of these 16 projects shows that the training aspect has not been neglected in this programme, and it is worth noting that there is a certain element of the training factor which is not quantified, but does exist in the numerous projects included under the grouping "Other national projects". The same applies to technical assistance projects; the very fact that they place operational experts at the disposal of African counterparts means that most of them contribute to the training of staff. Training and technical assistance projects represent 19.6 per cent of the total number of postal projects and $51.17 million (9.78 per cent) of the total cost of postal projects.

(d) Regional, subregional and national projects with subregional impact

108. The plan of action for the implementation of the Global Strategy of the Decade accorded first priority to regional, subregional and national projects with regional/subregional impact.

109. There are 17 of such projects in the programme for the postal sub-sector representing 12.59 per cent of the total number of projects and 32.13 per cent of the estimated cost. Most of these projects are connected with the establishment of sorting and transit centres which are indispensable for African postal services if they are to play an effective role in intra- and extra-African transactions.

(e) Other national projects

110. Almost 66 per cent of the second phase programme comprises various projects aimed at improving, the role of postal services in African countries (improved routing, proliferation of post offices, development of postal services in rural areas, acquisition of equipment, establishment of various structures, etc.). The cost of these projects is about $299 million representing 57.25 per cent of the over-all cost and judging by their number and cost, such projects, which would have been classified as third priority according to the order set out in the Global Strategy for the Decade, appear to have been given preference by member States which have in fact classified them as first priorities in the second phase programme.

Observations

111. Thirty-nine countries and four regional and subregional organizations presented a total of 135 projects.

112. Twenty-nine countries, i.e., more than 74 per cent of the 39 countries submitted projects with a total cost of $158.8 million, representing less than one third (30.37 per cent) of the over-all cost of the postal programme; nine countries account for almost half (47.30 per cent) with $246.11 million; a single country accounts for $80 million (15.30 per cent of the total cost), projects submitted by regional and subregional organizations amount to a total cost of $37.76 million, i.e., 7.22 per cent of the total.

113. The amount of external financing expected or already secured is very small ($0.89 million) and represents only 0.17 per cent of the estimated cost for the entire postal programme. Local financing amounts to $93.40 million (17.86 per cent but it should be noted that this local financing has been secured from one country which is responsible for $80 million i.e. 15.30 per cent of the total amount for the entire programme. The total amount expected and secured is therefore $94.30 million which represents 18.03 per cent of the total cost; $428.67 million is yet to be sought.

Chapter 5. OBSERVATIONS

114. The first phase programme contains 312 projects estimated to cost $1.12 billion whereas the second phase programme contains 472 projects (including those transferred from the first phase) estimated to cost $3.93 billion.

115. Of the three sub-sectors constituting the communications sector of the Decade, telecommunications has by far the largest number of projects in the sector's programme, with 46 per cent of the total number of projects and 69 per cent of the total cost of the programme. The broadcasting sub-sector accounts for 26 per cent of the total number of projects in the sector's programme and 18 per cent of the cost, while postal projects represent 28 per cent of the number of projects and 13 per cent of the cost.

116. The sectoral objectives for communications as outlined in the Global Strategy are, in sum, efficient and effective maintenance and operation of existing services; development of adequate manpower in order to maintain and operate existing services efficiently and at minimum cost, and systematic planning and expansion of services geared towards achieving set targets of availability.

117. In the implementation of the programme of the first phase (1980-1983), it is currently reckoned that the targets set out in the Global Strategy may not be attained by the end of the Decade in 1988 unless a greater effort is made to seek financing and implement the programme. For instance, in telecommunications, it is estimated that at the current rate of development the objective of one per cent telephone penetration can only be approached if the growth rate of 3.6 per cent (at the end of 1981) in the number of telephones were to be increased by 50 per cent for Africa south of the Sahara; Africa north of the Sahara having already achieved the UNTACDA target of one per cent telephone density.

118. To maintain and operate existing services efficiently and expand them subsequently to the levels of availability envisaged would seem to require higher proportions of resources for rehabilitation, maintenance and training projects than envisaged by the programme. Rehabilitation and maintenance as well as training and technical assistance projects together constitute some 10.4 per cent of total programme cost and 22 per cent of the total number of projects.

119. The expansion of services envisaged is provided for by over four-fifths of the total cost of the programme; of this total, 72 per cent in cost is for national projects other than rehabilitation, maintenance, training and technical assistance. Although this may well aid the achievement of the Decade targets of service availability in general, the share of regional projects is on the low side (at 17 per cent) considering that more of

such projects are required in order to achieve the over-all objectives set out in the Global Strategy.

120. There is also some distortion in the programme particularly for telecommunications and broadcasting where two single countries' programmes of action constitute respectively over 50 per cent and over 43 per cent of these subsectoral programmes. Table 4 gives the relevant details.

121. The intended investment over the five-year period as a percentage of GDP (1981) per country is shown in table 8 which also gives a breakdown of the programme for each country and of financing locally earmarked by each member country and secured from or committed by external sources. These figures indicate that some member countries (particularly LDCs) will require substantial external assistance in order to implement their plans. It is also seen that an average annual outlay of some 2.5 per cent of GDP over the five-year period of the second phase programme may have to be made by some member countries as against 0.5 per cent of GDP expended on the average by some better-endowed-than average member countries on telecommunications development. It must be mentioned in juxtaposition that already 46 per cent of the $3.93 billion required to implement the programme has already been secured from or committed by external financing sources or locally earmarked by member countries.

122. Substantial participation in the programme is expected of external financing agencies; it is difficult to estimate how much of the $2.11 billion still required to implement the programme is likely to be forthcoming from external sources in view of the present world financial climate, but it is encouraging to note that of the sum of $3.93 billion required, $1.64 billion, that is 42 per cent, has already been earmarked for projects within the programme by member countries in spite of the fact that $1.34 billion, that is 82 per cent of the amount earmarked, comes from the telecommunications programme of one member country alone.

General List of Projects

INTRODUCTION

123. The lists of projects by sub-sector submitted and approved for inclusion in the second phase programme by the fourth Conference of African Ministers of Transport, Communications and Planning can be found in tables 9, 10 and 11 for telecommunications, broadcasting and postal services respectively.

124. Telecommunications: The 216 projects for the telecommunications sub-sector, estimated to cost a total of $2.69 billion, have been divided into the five groups already mentioned and indicated in annexes 1 to 5.

125. By far the largest group of projects (46 per cent) is the "other national" followed closely by "other regional, subregional and national projects with subregional implications" (35 per cent); training projects constitute a modest 10 per cent (see also table 3).

126. Of the total amount of $2.692 billion required for implementing this subsectoral programme over the five-year period of the second phase of the Decade, $1.58 billion or 59 per cent of the total cost has either been secured, committed or locally earmarked. The portion of the $1.58 billion being contributed by African Governments is $1.48 billion or 55 per cent of the total telecommunications programme cost of $2.692 billion.

127. Broadcasting: The broadcasting sub-sector projects estimated to cost $716 million have also been divided into the five groups indicated in annexes 1 to 5.

128. Again by far the largest group of projects is "other national" which constitutes 72 per cent of the total number of projects at an estimated cost of $636 million or 89 per cent of the total cost of the programme for the sub-sector There are only three projects grouped under "other regional, subregional and national projects with subregional implications". This perhaps is by and large a reflection of the nature of broadcasting. Training projects constitute 12 per cent of the number for the sub-sector and rehabilitation and maintenance and technical assistance groups 7 per cent each (see also table 3).

129. Of the total sub-sector programme cost of $716 million, $146 million, that is 20 per cent has already been secured, committed or locally earmarked. Member countries have contributed $0.68 million or 49 per cent of the amount secured, committed or earmarked.

130. Postal services: Like the telecommunications and broadcasting sub-sectors, by far the largest group of projects is "other national" which constitutes 66 per cent of the number and over 57 per cent of the total cost of projects for this sub-sector. Rehabilitation and maintenance, training and technical assistance projects account for 21 per cent of the number of

projects and 11 per cent of the cost of the programme for the sub-sector (see also table 3).

131. Of the total amount ($523 million) required for this sub sector, $95 million, i.e., 17.3 per cent, has been secured from or committed by external sources or locally earmarked by member countries. Member countries' share of firancing "obtained" is 99 per cent.

132. In the list of projects by sub-sector, projects are indicated by symbol, country, title and total cost.

133. The project symbol consists of three components sub sector code, country code, and project number.

134. Projects for each country and for each sub-sector are thus easily identifiable.

135. The codes for the different communications sub-sectors are:

TEP: Telecommunications

MAP: Manpower*

SAP: Satellite communications*

BRP: Broadcasting

POP: Postal services

* Projects have been listed under telecommunications.

136. The country codes, according to the English alphabetical order, with 60 for regional/subregional projects, are as follows:

01	Algeria	27	Malawi*
02	Angola	28	Mali*
03	Benin*	29	Mauritania
04	Botswana*	30	Mauritius
05	Burundi*	31	Morocco
06	Cameroon	32	Mozambique
07	Cape Verde*	33	Niger*
08	Central African Republic*	34	Nigeria
09	Chad*	35	Rwanda*
10	Comores*	36	Sao Tome and Principe*
11	Congo	37	Senegal
12	Djibouti*	38	Seychelles
13	Egypt	39	Sierra Leone*
14	Equatorial Guinea*	40	Somalia*
15	Ethiopia*	41	Sudan*
16	Gabon	42	Swaziland
17	The Gambia*	43	Tanzania* (United Republic of)
18	Ghana	44	Togo*
19	Guinea *	45	Tunisia
20	Guinea-Bissau*	46	Uganda*
21	Ivory Coast	47	Upper Volta* 5/
22	Kenya	48	Zaire
23	Lesotho*	49	Zambia
24	Liberia	50	Zimbabwe
25	Libyan Arab Jamahiriya	60	Regional
26	Madagascar		

137. The list contains all the communications projects in the second phase programme.

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*Disadvantaged (classified by the United Nations as "least developed").

5/ While the name of the Upper Volta has been changed to Burkina Faso, it appears throughout Volumes III and IV as the Upper Volta.

Table 9. List of projects: Telecommunications

Project number	Project title	Annex	Total cost (in million $)
TEP-01-001	ALGERIA: Inmarsat coast station	4	4.50
TEP-01-002	ALGERIA: Radio frequency monitoring station	5	10.00
TEP-05-001	BURUNDI: Improve UHF radio link to Zaire	4	0.10
TEP-05-002	BURUNDI: Extension of exchange by 1,000 lines	5	0.70
TEP-05-003	BURUNDI: Extension of national network by 200 circuits	5	5.00
TEP-05-004	BURUNDI: Extension of the satellite earth station capability	4	0.12
TEP-05-005	BURUNDI: Extension of rural network	5	0.60
TEP-05-006	BURUNDI: Extension of local cable networks by 8,000 pairs	5	1.00
TEP-05-007	BURUNDI: Installation of twelve new telephone exchanges in the interior of the country	5	1.00
TEP-05-008	BURUNDI: Installation of a new 8,000 lines exchange at Bujumbura	5	6.50
TEP-06-001	CAMEROON: Extension of the capacity of nine telephone exchanges	5	7.83
TEP-06-002	CAMEROON: Extension of urban area network in six towns	5	5.00
TEP-06-003	CAMEROON: Construction of telephone exchanges in two towns	5	5.10
TEP-06-004	CAMEROON: Renovation of urban networks in six towns	5	7.50
TEP-06-006	CAMEROON: Frequency monitoring and receiving station	4	1.60

Project number	Project title	Annex	Total cost (in million $)
TEP-06-008	CAMEROON: Establishment of a domestic satellite station	5	12.70
TEP-06-009	CAMEROON: Establishment of a repair laboratory	1	0.83
TEP-07-001	CAPE VERDE: Extension of telecommunications services to the rural communities	5	4.50
TEP-08-001	CENTRAL AFRICAN REPUBLIC: Rehabilitation of Bangui-Mbaiki and Bangui-Berberati-Gamboula-Cameroon microwave links	1	0.60
TEP-08-002	CENTRAL AFRICAN REPUBLIC: Installation of tropospheric scatter link Bangui-Impfondo (Congo)	4	1.50
TEP-08-003	CENTRAL AFRICAN REPUBLIC: Rehabilitation of the local telephone networks in seven towns	1	1.63
TEP-08-004	CENTRAL AFRICAN REPUBLIC: Rehabilitation of the national radio communications network	1	1.67
TEP-08-005	CENTRAL AFRICAN REPUBLIC: Modernization and extension of telephone network of Bangui	5	13.30
TEP-09-001	CHAD: Reconstruction of the satellite earth station at N'Djamena	4	8.33
TEP-09-002	CHAD: Re-establishment of radio links between N'Djamena and five provincial towns	1	0.83
TEP-09-003	CHAD: Reconstruction of a telephone exchange and local cable network for Abeche	5	0.34
TEP-09-004	CHAD: Installation of interurban transmission network	5	50.00
TEP-10-001	COMOROS: Establishment of an earth station and installation of international switching equipment	4	4.00

Project number	Project title	Annex	Total cost (in million $)
TEP-10-002	COMOROS: Extension of the Moroni urban exchange	5	1.00
TEP-10-003	COMOROS: Telephone exchanges and local networks	5	7.70
TEP-11-001	CONGO: Establishment of an international telephone exchange	4	12.00
TEP-11-004	CONGO: Extension of the earth station at Moungouni	4	0.64
TEP-11-006	CONGO: Extension and rehabilitation of urban telephone networks and exchanges	1	12.10
TEP-11-007	CONGO: Realignment of the Brazzaville-Pointe Noire coaxial cable	5	1.74
TEP-11-008	CONGO: Study and establishment of regional telephone exchanges	5	8.00
TEP-11-009	CONGO: Installation of an international telex switching centre	4	3.18
TEP-12-003	DJIBOUTI: Balbala telephone exchange	5	3.85
TEP-12-004	DJIBOUTI: Installation of automatic exchanges in rural areas	5	0.75
TEP-12-005	DJIBOUTI: Submarine cable system	4	8.00
TEP-13-001	EGYPT: Construction of Aswan-Wadi Halfa (Sudan) microwave link	4	20.00
TEP-14-001	EQUATORIAL GUINEA: Establishment of a satellite earth station and related facilities	4	8.00
TEP-14-002	EQUATORIAL GUINEA: Rehabilitation of local telephone networks	1	0.36

Project number	Project title	Annex	Total cost (in million $)
TEP-14-003	EQUATORIAL GUINEA: Provision and installation of a telex and international telephone exchange	4	0.18
TEP-15-001	ETHIOPIA: Rural subscriber radio system	5	0.60
TEP-15-002	ETHIOPIA: Jijiga-Gode troposcatter link	5	1.20
TEP-15-003	ETHIOPIA: Extension of automatic exchange	5	1.80
TEP-15-004	ETHIOPIA: Gore-Gambela medium capacity UHF system	5	0.84
TEP-15-005	ETHIOPIA: Gondar-Humera troposcatter link	5	1.20
TEP-15-006	ETHIOPIA: Implementation of broadband microwave link between Assab (Ethiopia) and Djibouti	4	0.96
TEP-15-007	ETHIOPIA: Implementation of Ethiopia-Sudan (Bahr Dar-Gedaref) microwave radio relay system	4	1.84
TEP-16-001	GABON: Extension of the telecommunications network (Northeast Axis)	5	15.00
TEP-16-002	GABON: New coastal station at Libreville	4	12.10
TEP-16-003	GABON: Extension of the telecommunications network (Southern Axis)	5	16.00
TEP-17-001	THE GAMBIA: National trunk switching centre, Banjul	5	0.78
TEP-17-002	THE GAMBIA: Banjul telecommunications project	5	17.50
TEP-17-004	THE GAMBIA: Backbone rural telecommunications transmission system	5	...

Project number	Project title	Annex	Total cost (in million $)
TEP-17-005	THE GAMBIA: Provision of nine low capacity automatic telephone exchanges in the rural areas	5	3.10
TEP-18-001	GHANA: Rehabilitation of Takoradi and Tema coast radio stations	1	3.05
TEP-18-004	GHANA: Wenchi Bui-Wa-Lawra-Hamale/ Upper Volta border UHF radio link	4	5.93
TEP-18-005	GHANA: Sunyani-Berekim-Dormaa Ahenkro-Sampo/Yamosikro (Ivory Coast) UHF radio link	4	2.18
TEP-18-006	GHANA: New telecommunications engineering school at Adentan	2	31.34
TEP-18-007	GHANA: Accra/Bolgatanga microwave link	4	28.41
TEP-19-001	GUINEA: Establishment of an international communications transit centre	4	4.00
TEP-19-003	GUINEA: Extension of the Conakry and Kankan cable network	5	10.00
TEP-19-004	GUINEA: Telephone exchanges for 26 towns	5	52.00
TEP-19-005	GUINEA: Maintenance of telecommunications network	1	5.00
TEP-19-007	GUINEA: Rural telecommunications network	5	10.00
TEP-19-008	GUINEA: Replacement of radio communication facilities	5	3.00
TEP-19-009	GUINEA: Extension of Intelsat B station	4	2.00
TEP-19-010	GUINEA: HF radio communications	5	3.20
TEP-22-001	KENYA: Rural telecommunication project	5	5.90
TEP-24-001	LIBERIA: Telecommunications expansion/ standard A earth station	4	15.00

Project number	Project title	Annex	Total cost (in million $)
TEP-24-002	LIBERIA: Rural telecommunications project	5	3.30
TEP-24-003	LIBERIA: Provision of coastal communication station	4	1.83
TEP-24-004	LIBERIA: Telecommunications expansion/ Inmarsat station	4	8.00
TEP-27-001	MALAWI: National backbone trunk network	5	4.90
TEP-27-002	MALAWI: Urban networks for Blantyre and Lilongwe	5	26.50
TEP-27-003	MALAWI: Extension of urban networks	5	1.12
TEP-27-004	MALAWI: Telegraph and telex equipment	5	12.00
TEP-27-005	MALAWI: Development of small telephone networks	5	14.00
TEP-27-006	MALAWI: Development of rural telecommunications	5	1.09
TEP-29-001	MAURITANIA: Telecommunication development programme	5	24.00
TEP-30-003	MAURITIUS: Telecommunications training centre	2	0.80
TEP-31-001	MOROCCO: Establishment of five coastal stations	4	3.00
TEP-31-002	MOROCCO: Installation of rural transmission network	5	25.00
TEP-31-003	MOROCCO: Installation of rural telephone exchanges	5	15.20
TEP-33-001	NIGER: Installation of microwave links between Agadez and two regional capitals	5	3.66
TEP-34-001	NIGERIA: Lagos-Port Harcourt submarine cable	5	15.20
TEP-34-002	NIGERIA: Installation of Enugu satellite earth station	4	24.32

Project number	Project title	Annex	Total cost (in million $)
TEP-34-003	NIGERIA: Third satellite earth station, replacement of Lanlate I	4	1.00
TEP-34-004	NIGERIA: Inmarsat earth station for maritime communications	4	1.23
TEP-34-005	NIGERIA: International telex exchange at Enugu	4	6.40
TEP-34-006	NIGERIA: Abuja international switching centre	4	9.60
TEP-34-007	NIGERIA: Installation of telephone exchange switching equipment in 201 locations	5	259.20
TEP-34-008	NIGERIA: External line plant installations in 223 locations	5	775.85
TEP-34-009	NIGERIA: Provision of radio relay routes in transmission network	5	140.40
TEP-34-010	NIGERIA: Installation of telex/Gentex switching equipment	5	37.80
TEP-34-011	NIGERIA: Modification of terminal equipment for the domestic satellite communications system	5	43.20
TEP-34-012	NIGERIA: Radio monitoring station	5	28.80
TEP-34-013	NIGERIA: Extension of transmission network to link Lagos and Kaduna with major cities	5	7.23
TEP-35-001	RWANDA: International link Mt. Jari (Rwanda) - Ngara (United Republic of Tanzania)	4	0.20
TEP-35-002	RWANDA: International link Cyangugu (Rwanda)-Bukavu (Zaire)	4	0.16
TEP-35-003	RWANDA: International link Kigali Bujumbura (Burundi)	4	1.50

Project Number	Project title	Annex	Total cost (in million $)
TEP-35-004	RWANDA: Extension of the capacity of the interurban microwave link	5	2.53
TEP-35-006	RWANDA: Extension of the CT3, CTN and local exchanges	5	8.36
TEP-37-007	RWANDA: Extension of the rural network	5	4.00
TEP-36-001	SAO TOME AND PRINCIPE: Microwave link between Sao Tome and Principe	5	1.07
TEP-36-002	SAO TOME AND PRINCIPE: Telecommunications equipment	5	0.18
TEP-36-003	SAO TOME AND PRINCIPE: Extension to the telephone exchanges at Sao Tome, Neves and at Santo Antonio	5	1.40
TEP-37-001	SENEGAL: Extension of the 'Fraternity' submarine cable (Abidjan-Dakar)	4	0.35
TEP-37-002	SENEGAL: Extension of the international telephone transit exchange	4	4.00
TEP-37-004	SENEGAL: Extension of the international telex transit exchange	4	1.00
TEP-37-005	SENEGAL: Installation of a second earth station	5	6.70
TEP-37-009	SENEGAL: Automatization of the Casamance and Senegal/Eastern networks	5	29.60
TEP-37-017	SENEGAL: Construction of a submarine cable warehouse at Dakar	4	1.25
TEP-37-021	SENEGAL: West African cable factory	5	6.84
TEP-39-001	SIERRA LEONE: Development of meteorological telecommunications	5	0.23
TEP-39-002	SIERRA LEONE: Telecommunications satellite earth station, standard A	4	6.00

Project Number	Project title	Annex	Total cost (in million $)
TEP-39-003	SIERRA LEONE: Extension of telecommunications facilities to the rural areas: secondary telephone network	5	4.00
TEP-39-004	SIERRA LEONE. Improvement and extension of telephone facilities in the Freetown urban area	5	11.00
TEP-39-005	SIERRA LEONE: Provision of telephone facilities along the Freetown peninsula area	5	3.00
TEP-39-006	SIERRA LEONE: Provision of a national telex network	5	3.50
TEP-39-007	SIERRA LEONE: Provision of automatic exchange at Port Loko, Njala and Moyamba towns	5	5.00
TEP-39-008	SIERRA LEONE: Establishment of radio frequency monitoring and mobile stations	5	0.50
TEP-41-001	SUDAN: Implementation of Sudan-Egypt (Atbara-Wadi Halfa-Aswan) microwave radio relay system	4	8.00
TEP-41-002	SUDAN: Implementation of Sudan-Ethiopia (Gedaref-Bahr Dar) microwave radio relay system	4	2.50
TEP-41-003	SUDAN: Feasibility study and preliminary field survey for the continuation of the UHF link across the north-western Kenyan border to Kapoita, Torit till Juba	4	0.50
TEP-41-005	SUDAN: Upgrading of Umm Haraz international earth station	4	1.00
TEP-41-006	SUDAN: Retrofit and rehabilitation of the Sudan domestic satellite system (SUDOSAT)	1	17.00

Project Number	Project title	Annex	Total cost (in million $)
TEP-41-007	SUDAN: Capacity expansion and rehabilitation of the microwave backbone network	5	7.50
TEP-41-010	SUDAN: Improvement of the telegraphy services	5	2.00
TEP-42-001	SWAZILAND: Provision of four wire/trunk transit switching exchanges	4	4.32
TEP-42-002	SWAZILAND: Extension to Mbabane automatic telephone exchanges	5	3.10
TEP-42-003	SWAZILAND: Extension to rural automatic telephone exchanges	5	1.05
TEP-42-004	SWAZILAND: Expansion of the national radio trunk network	5	5.50
TEP-42-005	SWAZILAND: Development of rural telecommunications	5	0.72
TEP-43-001	TANZANIA: Tanzania-Rwanda microwave link, Ngara terminal	4	0.13
TEP-43-002	TANZANIA: Tanzania-Burundi microwave link	4	0.47
TEP-43-003	TANZANIA: Tanzania-Malawi microwave link	4	0.18
TEP-43-004	TANZANIA: Tanzania-Uganda microwave link	4	0.45
TEP-44-001	TOGO: Reinforcement of the Ouagadougou-Lome-Cotonou microwave links	4	2.50
TEP-44-002	TOGO: Establishment of coastal station	4	0.80
TEP-44-003	TOGO: Modernization and extension of the underground network of eight towns in the provinces	5	6.50
TEP-44-004	TOGO: Studies on the purchase of rural automatic exchanges	5	0.60

Project Number	Project title	Annex	Total cost (in million $)
TEP-44-005	TOGO: Increase in the capacity of telephone exchanges in six major towns	5	8.00
TEP-44-006	TOGO: Trunk links by radio-relay	5	8.00
TEP-44-007	TOGO: Integration of the rural zone (first part)	5	11.00
TEP-44-008	TOGO: Installation of radio-telephone and telegraph links between Lome and 11 centres	5	0.80
TEP-44-009	TOGO: Installation of telephone links with tourist centres and resorts	5	1.00
TEP-44-010	TOGO: Frequency control and synchronization centre	5	3.00
TEP-44-011	TOGO: International telephone transit centre	4	2.00
TEP-44-013	TOGO: Telephone equipment for road security	5	1.60
TEP-44-014	TOGO: Computerization of the management of posts and telecommunications services	5	1.42
TEP-46-001	UGANDA: Development of rural telecommunications	5	3.00
TEP-46-002	UGANDA: Jinja-Tororo-Gulu trunk route and telephone exchanges		10.14
TEP-46-003	UGANDA: Kampala-Masaka-Mbarara radio-relay link	5	4.80
TEP-47-001	UPPER VOLTA: Introduction of automatic system in five towns	5	2.10
TEP-47-002	UPPER VOLTA: Construction of automatic exchange and its associated local network at Po	5	0.63
TEP-47-003	UPPER VOLTA: Provision of local exchange equipment	5	0.21

Project Number	Project title	Annex	Total cost (in million $)
TEP-47-004	UPPER VOLTA: Microwave transmission link between Fada N'Gourma-Pana (Upper Volta) and Natitingou (Benin)	4	0.91
TEP-47-005	UPPER VOLTA: Extension of the telephone exchange and local network of Fada N'Gourma	5	0.87
TEP-47-005	UPPER VOLTA: Installation of telephone chanelling equipment	5	0.80
TEP-48-001	ZAIRE: Rehabilitation and extension of the telephone and telex switching system	1	12.53
TEP-48-002	ZAIRE: Rehabilitation and extension of local urban networks	1	24.30
TEP-48-003	ZAIRE: Rehabilitation and extension of national transmission system	1	13.00
TEP-48-004	ZAIRE: Rehabilitation of power supply system	1	6.67
TEP-49-001	ZAMBIA: Extension of satellite earth station	4	14.40
TEP-49-002	ZAMBIA: Radio monitoring station	5	1.89
TEP-50-001	ZIMBABWE: Installation of a standard "A" earth station	4	12.60
TEP-60-001	Implementation of PANAFTEL project	4	207.77
TEP-60-002	PANAFTEL project Phase II: Survey of additional routes	4	3.50
TEP-60-003	Rural telecommunications: Survey	4	0.70
TEP-60-004	Rural telecommunications: Pilot projects	4	1.34
TEP-60-005	Feasibility study: Manufacturing and research	4	1.50

Project Number	Project title	Annex	Total cost (in million $)
TEP-60-006	Study on joint utilisation of satellite communication earth station facilities for common-carrier communication	4	0.60
TEP-60-007	Survey and evaluation of organisational arrangements and promotion of management efficiency	4	0.50
TEP-60-008	Direct assistance to countries for the introduction of maintenance procedures	3	3.00
TEP-60-009	Assistance and provision of expertise for telecommunication sectoral development	3	2.15
TEP-60-010	Provision of assistance in planning to a number of countries	3	0.40
TEP-60-011	Assistance in reorganisation and provision of expertise in management and organisational methodology	3	0.50
TEP-60-012	Operation and maintenance: Basic studies and courses for senior staff	1	0.58
TEP-60-013	Fellowships for training in telecommunications development planning	4	0.60
TEP-60-014	Establishment and improvement of regional primary synchronising and frequency monitoring centres	4	5.00
TEP-60-015	Study for the establishment of subregional maritime radio transmission centres	4	0.06
TEP-60-016	East African (including island countries) submarine cable links and possible link-up to the Pacific Ocean system	4	0.30
TEP-60-017	Study on the possibilities for industrialization in the field of telecommunications equipment	4	0.10

Project Number	Project title	Annex	Total cost (in million $)
TEP-60-018	Establishment of a laboratory for the repair and calibration of measuring equipment	4	1.50
TEP-60-019	Survey of Comoros-Madagascar-United Republic of Tanzania link	4	0.04
TEP-60-020	Burundi-Rwanda-United Republic of Tanzania-Uganda PANAFTEL link	4	9.00
TEP-60-021	Malawi-United Republic of Tanzania microwave link	4	4.50
TEP-60-022	Administrative and technical conference on telecommunications	4	0.85
TEP-60-023	UAPT: Data bank	4	0.50
TEP-60-024	Seminar on tele-traffic	2	0.17
TEP-60-026	Establishment of a subregional pilot centre for maintenance	4	0.15
TEP-60-027	Seminar on choice of criteria for telecommunications equipment	2	0.17
TEP-60-028	Rwanda/Uganda: Establishment of Kigali-Kampala international link	4	0.82
TEP-60-029	Subregional co-ordinating meeting	4	0.80

Project Number	Project title	Annex	Total cost (in million $)
MAP-60-001	Follow-up of manpower and training needs surveys for 31 countries	2	0.35
MAP-60-002	Establishment of a regional and multinational training centre for medium-level manpower for the Central African countries	2	8.24
MAP-60-003	Introduction of management courses with special relevance to telecommunication fields for top and middle management personnel at existing institutions	2	3.74
MAP-60-004	Seminars, special courses and workshops in fields of common-carrier communication, sound broadcasting and television	2	1.42
MAP-60-005	Establishment of multinational institutions for training high-level staff and instructors	2	8.97
MAP-60-006	Development of a regional telecommunications manpower inventory/directory	2	0.05
MAP-60-007	Establishment of a multinational training centre for medium-level manpower for the Lusophone countries	2	2.25
MAP-60-008	Operations and maintenance of installations workshops and seminars	2	1.00
MAP-60-009	Rural telecommunications: Workshops and seminars	2	0.40
MAP-60-010	Establishment and strengthening of more medium-level training centres Eastern and Southern subregion West subregion Central subregion North subregion	2	35.00
MAP-60-011	Establishment of more high-level training institutes	2	26.31

Project Number	Project title	Annex	Total cost (in million $)
MAP-60-012	Establishment of training centres for basic-level technicians in telecommunications for countries without these facilities	2	10.07
MAP-60-013	Further development of national basic and medium-level training centres in the Eastern and Southern African subregions	2	10.00
MAP-60-014	Establishment of national medium-level training centres in 26 countries where there are none at present	2	15.75
MAP-60-015	Establishment of a regional school for satellite communications	2	2.50
MAP-60-016	Establishment of a staff exchange programme	2	0.15
MAP-60-017	Improvement of the Mano River Union P and T Training Institute	2	6.06
SAP-60-001	Feasibility study on the Regional African Satellite Communication System	3	3.50
SAP-60-002	Joint seminars and courses on communications by satellite	2	0.20

Table 10. List of projects: Broadcasting

Project Number	Project title	Annex	Total cost (in million $)
BRP-03-001	BENIN: Assistance for the development of the national broadcasting and television network	5	4.80
BRP-03-002	BENIN: Development of the West and Central African press agencies	5	0.60
BRP-03-003	BENIN: Extension of radio and television services	5	15.80
BRP-04-001	BOTSWANA: Improvement of the short-wave broadcasting network	5	2.60
BRP-04-002	BOTSWANA: Improvement of the Very High Frequency broadcasting network	5	0.20
BRP-04-003	BOTSWANA: Establishment of radio information centres in eight towns	5	0.24
BRP-05-003	BURUNDI: Introduction of television	5	5.20
BRP-05-004	BURUNDI: Regional sound broadcasting studios	5	4.20
BRP-06-001	CAMEROON: Installation of a national colour television network	5	187.00
BRP-06-002	CAMEROON: Study and installation of a national VHF/FM broadcasting network	5	6.30
BRP-06-003	CAMEROON: Improvement of medium-wave coverage in five cities and construction of a sound-broadcasting production centre at Douala	5	45.00
BRP-06-004	CAMEROON: Installation of a medium-wave transmitter and reconstruction of the sound-broadcasting production centre at Buea	5	5.00
BRP-06-005	CAMEROON: Study and construction of a monitoring centre in the Mbalmayo area	5	3.85

Project Number	Project title	Annex	Total cost (in million $)
BRP-06-006	CAMEROON: Improvements to the radio broadcasting station in Bamenda	5	12.50
BRP-06-007	CAMEROON: Establishment of four regional radio stations	5	50.00
BRP-06-009	CAMEROON: Procurement of 10 mobile stations	5	2.50
BRP-07-001	CAPE VERDE: Installation of transmitters and additional VHF/FM studio equipment	5	0.35
BRP-07-002	CAPE VERDE: Installation of a television transmission system and equipment of a studio	5	0.85
BRP-07-003	CAPE VERDE: Purchase of maintenance and measuring equipment and spare parts	1	0.20
BRP-07-004	CAPE VERDE: Installation of a High Frequency transmitter for overseas services	5	0.50
BRP-07-005	CAPE VERDE: Construction of a radio and television centre	5	1.00
BRP-08-003	CENTRAL AFRICAN REPUBLIC: Installation of community television receiving centres	5	0.50
BRP-08-005	CENTRAL AFRICAN REPUBLIC: Reinforcement of equipment at Radio Bangui programming centre	5	0.45
BRP-08-006	CENTRAL AFRICAN REPUBLIC: Improvement of radio coverage	5	1.58
BRP-09-001	CHAD: Establishment of broadcasting programme production centres in five towns	5	0.91

Project Number	Project title	Annex	Total cost (in million $)
BRP-09-002	CHAD: Improvement to the medium wave network in four towns	5	1.60
BRP-09-004	CHAD: Establishment of radio information centres in five towns	5	0.15
BRP-09-005	CHAD: Rehabilitation of radio broadcasting	1	6.26
BRP-10-003	COMOROS: Expert in broadcasting management and planning	3	0.04
BRP-10-006	COMOROS: Provision of a training expert at Radio Comores	2	0.07
BRP-11-002	CONGO: Construction of Phase I of the Radio-TV House in Brazzaville	5	18.20
BRP-12-004	DJIBOUTI: Extension to radio and television building, construction of a new television house	5	2.54
BRP-13-002	EGYPT: Improvement of training institutes	2	6.00
BRP-13-003	EGYPT: Establishment of educational TV and sound programmes production centre	5	3.00
BRP-14-001	EQUATORIAL GUINEA: Construction of a broadcasting house	5	2.00
BRP-14-002	EQUATORIAL GUINEA: Improvement of television coverage	5	1.90
BRP-15-001	ETHIOPIA: Provision of three regional medium-wave stations	5	8.34
BRP-15-002	ETHIOPIA: Establishment of four low power television transmitting stations	5	2.00

Project Number	Project title	Annex	Total cost (in million $)
BRP-16-001	GABON: Coverage of national territory by VHF/TV and FM broadcast	5	30.00
BRP-17-001	THE GAMBIA: Improvement of facilities of Radio Gambia	5	0.30
BRP-17-002	THE GAMBIA: Feasibility study on the establishment of TV	5	0.20
BRP-17-003	THE GAMBIA: Development of information and broadcasting sector	5	1.40
BRP-18-002	GHANA: Rehabilitation of Weija monitoring station	1	0.68
BRP-18-003	GHANA: Improvement of facilities and training institutes for broadcasting	2	19.32
BRP-18-004	GHANA: Rehabilitation of radio programme production in all regions	1	0.58
BRP-19-003	GUINEA: Feasibility study on the construction of a radio and television broadcasting house	5	0.50
BRP-19-006	GUINEA: Construction of four television transmission centres	5	4.10
BRP-19-007	GUINEA: Staff training for radio and television programming and transmission centre	2	0.24
BRP-19-008	GUINEA: Improvement of television services	5	1.34
BRP-22-001	KENYA: Feasibility study on improvement of the Institute of Mass Communications	2	0.28
BRP-22-004	KENYA: Establishment of a new broadcasting centre	5	16.47
BRP-22-005	KENYA: Establishment of a national VHF/FM broadcasting system throughout the country	5	22.00

Project Number	Project title	Annex	Total cost (in million $)
BRP-22-008	KENYA: Extension of rural mobile press units in 42 districts	5	0.74
BRP-24-001	LIBERIA: Establishment of the Liberian rural broadcasting network	5	18.00
BRP-26-001	MADAGASCAR: Feasibility study on expansion of the television transmission network	5	0.25
BRP-26-002	MADAGASCAR: Feasibility study on the enlargement of the telecommunications training institute to cater for broadcasting	2	0.05
BRP-27-001	MALAWI: Extension of the multinational telecommunications training institute in Blantyre to cater for broadcasting technicians	2	0.45
BRP-28-001	MALI: Construction of programme production centres in four towns	5	4.00
BRP-28-004	MALI: Establishment of three maintenance laboratories	1	0.36
BRP-29-001	MAURITANIA: Establishment of programme production centres in five towns	5	0.88
BRP-29-002	MAURITANIA: Establishment of a specialized manpower training centre	2	1.80
BRP-29-003	MAURITANIA: Installation of medium-wave transmitters in five towns	5	4.47
BRP-29-004	MAURITANIA: Improvement of existing broadcasting facilities	5	2.24
BRP-29-005	MAURITANIA: Establishment of a second programme network	5	2.90

Project Number	Project title	Annex	Total cost (in million $)
BRP-29-006	MAURITANIA: Establishment of a regional rural radio	5	2.00
BRP-33-001	NIGER: Installation of a 20 kW short-wave transmitter at Niamey	5	0.23
BRP-35-001	RWANDA: Battery factory	5	3.00
BRP-35-002	RWANDA: Implementation study for a second radio channel	5	0.50
BRP-35-003	RWANDA: Training of senior staff	2	...
BRP-35-004	RWANDA: TV coverage study	5	...
BRP-35-005	RWANDA: Equipment for the Rwandese News Agency	5	0.34
BRP-35-006	RWANDA: Studies for the installation of a monitoring centre	5	0.06
BRP-35-007	RWANDA: Improvement of nation-wide FM and short-wave coverage	5	6.50
BRP-35-008	RWANDA: Modernization of the factory for the manufacture of radio receivers	5	0.49
BRP-36-001	SAO TOME AND PRINCIPE: Development of broadcasting	5	0.24
BRP-39-001	SIERRA LEONE: Improvement of short-wave broadcasting	5	1.10
BRP-39-002	SIERRA LEONE: Improvement and extension of the national television service	5	12.17
BRP-40-001	SOMALIA: Somalia television project	5	2.40
BRP-43-002	TANZANIA: Installation of medium-wave transmitters	5	6.00

Project Number	Project title	Annex	Total cost (in million $)
BRP-43-004	TANZANIA: Feasibility study on TV and FM broadcasting	5	0.20
BRP-43-005	TANZANIA: Broadcasting studio construction and provision of studio equipment for Dodoma and Kigoma	5	3.40
BRP-43-006	TANZANIA: Mobile recording vans	5	0.56
BRP-43-008	TANZANIA: Construction of zonal production centres in mainland Tanzania	5	...
BRP-44-004	TOGO: Extension of the programme production centre and improvement of service for Radio Lome	5	3.90
BRP-44-005	TOGO: Modernization of production equipment at Radio-Kara and improvement in nation wide reception	5	1.90
BRP-44-006	TOGO: Purchase and installation of TV equipment	5	3.90
BRP-45-001	TUNISIA: Extension of FM broadcasting network	5	3.40
BRP-45-002	TUNISIA: Installation of a second TV channel	5	14.20
BRP-45-003	TUNISIA: Improvement of sound broadcasting and television coverage	5	42.00
BRP-46-001	UGANDA: Rehabilitation of sound broadcasting network	1	6.73
BRP-46-002	UGANDA: Rehabilitation of television broadcasting network	1	8.27
BRP-46-005	UGANDA: Outside broadcasting and mobile recording units	5	1.81
BRP-46-006	UGANDA: Rehabilitation of 300 viewing and listening posts	1	1.65
BRP-46-013	UGANDA: In-plant training for maintenance technicians	2	1.75

Project Number	Project title	Annex	Total cost (in million $)
BRP-47-001	UPPER VOLTA: Installation of VHF/FM transmitters and establishment of programme production centres in six towns	5	6.00
BRP-47-002	UPPER VOLTA: Construction and equipment of national film centre	5	1.42
BRP-47-003	UPPER VOLTA: Installation of the Voltaic News Agency	5	8.20
BRP-47-004	UPPER VOLTA: Construction of a broadcasting house	5	3.40
BRP-48-001	ZAIRE: Modernization of the sound broadcasting centre at Kinshasa	5	0.05
BRP-48-002	ZAIRE: Construction of two television and two sound broadcasting studios in Kinshasa	5	22.00
BRP-49-001	ZAMBIA: Upgrading of transmitters	5	5.00
BRP-49-003	ZAMBIA: Regional radio and television studios	5	10.10
BRP-49-004	ZAMBIA: Training of broadcasting personnel	2	0.75
BRP-49-005	ZAMBIA: Installation of medium-wave transmitting stations	5	3.95
BRP-49-006	ZAMBIA: Radio and television OB vans	5	2.50
BRP-49-007	ZAMBIA: Mass-media complex	5	3.50
BRP-50-002	ZIMBABWE: Assistance in broadcasting management training for Zimbabwe broadcasting staff	2	0.50
BRP-50-003	ZIMBABWE: Strengthening of Zimbabwe Institute of Mass Communication	2	2,00
BRP-60-001	Development of broadcasting in Africa	3	9.50

Project Number	Project title	Annex	Total cost (in million $)
BRP-60-002	Development of the URTNA rural broadcasting centre at Ouagadougou	3	2.00
BRP-60-003	Seminars and working groups at the sub-regional level on the management and planning of broadcasting organizations and on the role of broadcasting in national development	2	0.72
BRP-60-004	Feasibility study on a television film industry in Africa	4	0.24
BRP-60-005	Feasibility study on the teaching of African languages by radio and television	4	0.30
BRP-60-006	Regional radio propagation studies of all frequency bands	4	3.50
BRP-60-007	Assistance to the URTNA programme exchange centre	3	0.22
BRP-60-010	Assistance for the development of news agencies	3	5.00
BRP-60-011	African institute for communication development	3	0.85
BRP-60-013	Follow-up project on the fabrication of some components of the model low-cost sound broadcasting system	3	0.65
BRP-60-014	Assistance to the Pan-African News Agency in the field of equipment, manpower training and technical operations	3	...
BRP-60-015	Establishment of a broadcasting planning and development unit (nucleus) to assist requesting African countries in planning and development of broadcasting services	3	0,70

Table 11: List of projects: Postal Services

Project Number	Project title	Annex	Total cost (in million $)
POP-03-001	BENIN: Establishment of a regional transit centre at Cotonou	4	2.15
POP-03-002	BENIN: Postal services in rural areas	5	1.58
POP-04-001	BOTSWANA: Administrative decentralization of postal services	3	0.18
POP-04-002	BOTSWANA: Establishment of a postal bus service	5	0.22
POP-05-001	BURUNDI: Construction of four post offices	5	0.40
POP-05-002	BURUNDI: Establishment of a national sorting centre	5	1.00
POP-05-003	BURUNDI: Purchase of vehicles	5	0.27
POP-06-001	CAMEROON: Establishment of a regional transit centre at Douala	4	21.84
POP-06-002	CAMEROON: Establishment of mail sorting centres at Yaounde and Douala	5	8.96
POP-06-003	CAMEROON: Establishment of Giro centres at Garoua and Limbe	5	3.50
POP-06-004	CAMEROON: Extension of the mobile postal service in rural areas and State-run transport services	5	2.02
POP-06-006	CAMEROON: Construction of a main post office with administrative services at Yaoundé	5	5.72
POP-08-001	CENTRAL AFRICAN REPUBLIC: Establishment of rural mobile postal services	5	0.39
POP-08-002	CENTRAL AFRICAN REPUBLIC: Organization and equipment of Giro Centres and the national post office savings bank at Bangui	5	1.12

Project Number	Project title	Annex	Total cost (in million $)
POP-08-003	CENTRAL AFRICAN REPUBLIC: Development of postal services	5	0.26
POP-08-004	CENTRAL AFRICAN REPUBLIC: Development of a national mail routeing network	5	4.50
POP-08-005	CENTRAL AFRICAN REPUBLIC: Modernization and development of the postal service network	5	0.53
POP-08-006	CENTRAL AFRICAN REPUBLIC: Improvement and equipment of the national Posts and Telecommunications School	2	1.01
POP-08-007	CENTRAL AFRICAN REPUBLIC: Modernization of financial service equipment	5	0.90
POP-08-008	CENTRAL AFRICAN REPUBLIC: Logistical facilities common to the postal and telecommunications services	5	4.53
POP-09-002	CHAD: Establishment of rural mobile postal service	5	0.17
POP-09-003	CHAD: Purchase of postal equipment and revival of the activities of the Posts and Telecommunications Office	5	1.06
POP-09-006	CHAD: Construction of new post offices in the capital and within the country	5	1.00
POP-10-001	COMOROS: Establishment of a vocational training centre	2	0.53
POP-10-002	COMOROS: Establishment of mobile post offices in rural areas	5	0.35
POP-10-003	COMOROS: Construction of 12 new post offices	5	1.47
POP-10-004	COMOROS: Construction of a central post office	5	0.30
POP-10-005	COMOROS: Construction of a mail sorting centre at Moroni	5	3.50
POP-11-001	CONGO: Establishment of a regional postal transit centre at Brazzaville	4	13.89

Project number	Project title	Annex	Total cost (in million $)
POP-11-003	CONGO: Organization of intra- and inter-regional mail routeing	5	0.40
POP-11-004	CONGO: Transformation of 11 postal agencies into secondary post offices	5	0.59
POP-11-005	CONGO: Modernization of postal service network in rural areas	1	1.45
POP-11-006	CONGO: Extension of the postal network in rural areas	5	0.68
POP-11-007	CONGO: Opening up of rural areas through the establishment of post offices	5	0.59
POP-11-008	CONGO: Mechanization of counter services at the main post offices and Giro centres	5	0.10
POP-12-001	DJIBOUTI: Establishment of a post office and a postal training centre	2	0.37
POP-13-001	EGYPT: Expansion of the postal printing house	5	4.50
POP-14-001	EQUATORIAL GUINEA: Development of postal services	3	0.05
POP-14-002	EQUATORIAL GUINEA: Rehabilitation of five post offices	1	0.25
POP-14-003	EQUATORIAL GUINEA: Purchase of postal equipment	5	0.13
POP-14-004	EQUATORIAL GUINEA: Purchase of vehicles	5	0.30
POP-15-001	ETHIOPIA: Development of postal services, especially in rural areas	5	8.32
POP-16-001	GABON: Construction of an administrative complex at Libreville	5	15.00
POP-16-002	GABON: Construction of a national mail sorting centre	5	15.00
POP-17-001	THE GAMBIA: Improvement of postal services	5	1.13
POP-17-002	THE GAMBIA: Post office and training school at Bakau	5	0.37

Project Number	Project title	Annex	Total cost (in million $)
POP-17-003	THE GAMBIA: Rural mail routeing	5	0.05
POP-18-001	GHANA: Establishment of a regional transit and training centre at Accra	4	22.00
POP-19-001	GUINEA: Improvement of relations between the Post and its users	5	10.66
POP-19-002	GUINEA: Construction of a general post office at Conakry	5	20.00
POP-20-001	GUINEA-BISSAU: Establishment of a postal training centre	2	0.65
POP-20-002	GUINEA-BISSAU: Purchase of vehicles	5	0.27
POP-20-003	GUINEA-BISSAU: Construction of five post offices	5	0.16
POP-20-004	GUINEA-BISSAU: Purchase of postal equipment	5	1.00
POP-21-001	IVORY COAST: Establishment of a workshop for manufacturing postal material at Abidjan	4	5.00
POP-21-002	IVORY COAST: Establishment of a workshop for manufacturing postage stamps at Abidjan	4	5.00
POP-21-003	IVORY COAST: Construction of postal liaison centres	5	2.50
POP-24-002	LIBERIA: Improvement and extension of postal services	5	3.01
POP-26-001	MADAGASCAR: Establishment of a regional transit centre at Antananarivo	4	21.84
POP-26-002	MADAGASCAR: Purchase of vehicles for transporting mail	5	0.45
POP-26-003	MADAGASCAR: Postal services training programme	2	0.02
POP-26-004	MADAGASCAR: Purchase of vans and construction of four vehicle maintenance workshops	5	1.55

Project Number	Project title	Annex	Total cost (in million $)
POP-27-001	MALAWI: Establishment of two sorting centres/offices of exchange	5	1.50
POP-27-002	MALAWI: Establishment of 16 new post offices	5	2.00
POP-28-001	MALI: Establishment of a regional transit centre at Bamako	4	7.00
POP-28-002	MALI: Equipment of 15 rural mobile post offices	5	0.43
POP-28-004	MALI: Establishment of an airmail office of exchange at Senou	5	0.52
POP-30-001	MAURITIUS: Electronic equipment for the post office savings bank	5	0.93
POP-31-001	MOROCCO: Establishment of a sorting centre at Fes	4	4.31
POP-31-002	MOROCCO: Establishment of a sorting centre at Rabat	4	4.31
POP-32-001	MOZAMBIQUE: Establishment of surface mail transit centre at Beira	4	10.00
POP-32-003	MOZAMBIQUE: Establishment of a multi-national postal training school at Beira	2	4.00
POP-32-004	MOZAMBIQUE: Establishment of an international airmail transit centre	5	10.00
POP-32-005	MOZAMBIQUE: Purchase and installation of stamp printing equipment	5	1.00
POP-33-001	NIGER: Establishment of mobile post offices in rural areas	5	0.18
POP-33-002	NIGER: Supply of equipment for the money order control centre at Niamey	5	0.02
POP-33-003	NIGER: Establishment of eight post offices and a sorting centre	5	5.10
POP-34-001	NIGERIA: Postal management college	2	23.60

Project Number	Project title	Annex	Total cost (in million $)
POP-34-002	NIGERIA: Tin Can Island port surface mail transit centre	5	20.50
POP-34-003	NIGERIA: Establishment of an airmail transit centre	5	11.60
POP-34-004	NIGERIA: Establishment of a regional transit centre at Lagos	5	24.30
POP-35-001	RWANDA: Establishment of a mail and postal parcel sorting centre at Kigali	5	8.96
POP-35-002	RWANDA: Improvement of rural postal services	5	0.70
POP-35-003	RWANDA: Reorganization of the Kigali postal training centre	2	0.30
POP-35-004	RWANDA: Reorganization of the mail sorteing network	5	0.60
POP-35-005	RWANDA: Construction of post offices in the interior	5	2.55
POP-36-001	SAO TOME AND PRINCIPE: Organization of mail delivery	5	0.03
POP-36-002	SAO TOME AND PRINCIPE: Purchase of postal equipment	5	0.11
POP-36-003	SAO TOME AND PRINCIPE: Rural mobile post office	5	0.02
POP-37-001	SENEGAL: Establishment of a regional transit centre at Dakar	4	10.00
POP-39-001	SIERRA LEONE: Improvement of postal services	5	3.68
POP-41-001	SUDAN: Development of postal services especially in rural areas	5	4.00
POP-42-001	SWAZILAND: Computerization of postal and financial services	5	0.41
POP-42-002	SWAZILAND: Establishment of a national postal and telecommunications training centre	2	1.80

Project Number	Project title	Annex	Total cost (US million $)
POP-42-003	SWAZILAND: Establishment of an international airmail office of exchange	5	0.49
POP-42-004	SWAZILAND: Establishment of post offices in rural areas	5	0.48
POP-42-005	SWAZILAND: Establishment of a surface mail office of exchange	5	0.51
POP-43-001	UNITED REPUBLIC OF TANZANIA: Establishment of an international airmail transit centre at Dar-es-Salaam	4	13.00
POP-44-001	TOGO: Construction of a mail sorting centre at Lomé	5	6.50
POP-44-002	TOGO: Construction and equipment of a new main post office at Lomé	5	6.32
POP-44-003	TOGO: Development and reorganization of the post office savings bank in rural areas	5	1.50
POP-44-004	TOGO: Purchase of postal equipment	5	1.00
POP-44-005	TOGO: Construction of 15 post offices	5	4.40
POP-44-006	TOGO: Reorganization and development of postal services in rural areas	5	0.40
POP-44-007	TOGO: Establishment of a national posts and telecommunications school	2	3.20
POP-47-001	UPPER VOLTA: Construction and equipment of a sorting centre at Ouagadougou	5	3.40
POP-47-002	UPPER VOLTA: Construction of 13 new post offices	5	2.30
POP-47-003	UPPER VOLTA: Reconstruction of four post offices	1	2.64
POP-48-001	ZAIRE: Construction of a sorting centre at Goma	5	7.00
POP-48-002	ZAIRE: Study of the establishment of rural mobile post office circuits and purchase of vehicles	5	3.00

Project Number	Project title	Annex	Total cost (in million $)
POP-48-003	ZAIRE: Establishment of new post offices	5	2.00
POP-48-004	ZAIRE: Construction of a sorting centre in Kinshasa	5	15.00
POP-48-005	ZAIRE: Purchase of postal equipment	5	0,90
POP-48-006	ZAIRE: Study for the improvement of Giro services	3	0.35
POP-48-007	ZAIRE: Study for the construction of a printing unit	3	0.10
POP-49-001	ZAMBIA: Construction of an office of exchange and a surface mail sorting centre	5	0.60
POP-49-002	ZAMBIA: Organization of mail transport	5	2.00
POP-50-001	ZIMBABWE: Establishment of a postal transit centre at Harare	5	8.00
POP-50-002	ZIMBABWE: Establishment of a sorting centre at Harare	5	4.20
POP-50-003	ZIMBABWE: Establishment of a postal training centre at Harare	2	1.50
POP-60-002	UPU: Establishment of a multinational postal school at Brazzaville	2	3.00
POP-60-003	UPU: Establishment of workshops for manufacturing small items of postal equipment	4	1.18
POP-60-004	UAPT: Construction of a workshop for manufacturing postage stamps	4	19.00
POP-60-005	UPU: Mobilization of savings by postal means, particularly in rural areas	3	1.40
POP-60-006	ECA: Development planning for postal services in least developed countries	3	0.48
POP-60-008	UAPT: Establishment of an African post office savings bank institute	4	7.13

Project Number	Project title	Annex	Total cost (in million $)
POP-60-009	UAPT: Study for the drawing up of a regional routeing plan and organization of services	3	0.65
POP-60-010	ECA/UPU: Specialized training	2	1.80
POP-60-015	UPU: Establishment of a postal research centre	2	1.88
POP-60-016	UPU: Preparation of modular courses for national and multinational schools	2	1.20
POP-60-017	UPU: Establishment of pilot offices for postal services in rural areas of least developed African countries	4	0.42
POP-60-018	UPU: Elaboration of regional and sub-regional postal statistics models	3	0.70
POP-60-019	UPU: Establishment and development of statistical and planning units within postal administrations	3	0.70
POP-60-020	UPU: Training of African postal specialists to promote technical co-operation among developing countries in Africa	2	0.72
POP-60-021	PAPU: Establishment of a postal ragulation and legislation committee	3	0.50

Table 12. Summary details of financing secured, committed or locally earmarked (in millions of dollars)

Project grouping	TEP		BRP		POP		Total
	External	Local	External	Local	External	Local	
Rehabilitation/ maintenance	7.58	5.10	0.66	2.11	-	1.45	16.90
Training	-	30.34	-	3.77	0.30	23.80	58.21
Technical assistance	-	-	0.56	-	0.49	-	1.05
Other regional	54.68	55.44	-	-	-	-	110.12
Other national	43.23	1383.08	73.50	65.85	0.10	68.16	1633.92
Total	105.49	1473.97	74.72	71.73	0.89	93.41	1820.20

LIST OF PROJECTS BY NATURE

1. Rehabilitation and maintenance projects

The criterion for inclusion of a rehabilitation and maintenance project in the group is that such a project should contain elements of maintenance and/or rehabilitation of existing infrastructure/service and that the objective of proposed expenditure of resources sought should be preservation of existing assets and/or restoration of service. This criterion is based on third Conference of African Ministers of Transport, Communications and Planning resolution ECA/UNTACDA/Res.83/23, operative paragraph 6(f).

In the telecommunications sub-sector there are altogether 15 projects estimated at $100.2 million in the group of rehabilitation and maintenance projects; annex I gives the details. See also table 12 for summary details of financing for each of the groups. Only one of those 15 projects is regional.

Funds for the single regional projects TEP-60-012: "Operations and maintenance: studies and courses" estimated at $0.58 million have been secured from UNDP. Funds have been locally earmarked to part-finance two of the projects and a third project is being financed by UNDP. Altogether 12.7 per cent of the funds required for this group of projects has been secured, committed or locally earmarked.

For the broadcasting sub-sector eight projects (all national and estimated to cost $24.7 million) have been grouped under the rehabilitation and maintenance label. Annex 1 gives the details.

Part of the funds required for each of four projects have been locally earmarked. A fifth project is externally funded. These funds constitute 9.1 per cent of total funds required.

For the postal sub-sector, there are three projects which are estimated to cost $4.34 million. These are listed in annex 1. They concern the repair or enlargement of post offices as well as the renewal of equipment.

The number of projects in this group constitutes only 2.2 per cent of the sub-sectoral programme. External financing secured or pledged amounts to $396,150 and local financing to $68.27 million, i.e., 41 per cent of the cost.

The number of projects in rehabilitation and maintenance constitutes only 5.5 per cent of the total communications programme. No external financing has been secured or pledged, but local financing available amounts to $1.45 million.

Annex 1: List of projects: Rehabilitation and maintenance (26 projects)

(1) Total cost: $129.22 million
(2) Financing secured: External $ 1.24 million
(3) Financing secured: Local $ 15.66 million
(4) External financing required: $112.32 million

Project number	Country and title	(1)	(2)	(3)	(4)
	1. Telecommunications				
TEP-06-009	CAMEROON: Establishment of a repair laboratory	0.83	-	-	0.83
TEP-08-001	CENTRAL AFRICAN REPUBLIC: Rehabilitation of Bangui-Mbaiki and Bangui-Berberati-Gamboula-Cameroon micro-wave links	0.60	-	-	0.60
TEP-08-003	CENTRAL AFRICAN REPUBLIC: Rehabilitation of the local telephone networks in seven towns	1.63	-	-	1.63
TEP-08-004	CENTRAL AFRICAN REPUBLIC: Rehabilitation of the national radio communications network	1.67	-	-	1.67
TEP-09-002	CHAD: Re-establishment of radio links between N'Djamena and five provincial towns	0.83	-	-	0.83
TEP-11-006	CONGO: Extension and rehabilitation of urban telephone networks and exchanges	12.10	-	4.10	8.00
TEP-14-002	EQUATORIAL GUINEA: Rehabilitation of local telephone networks	0.36	-	-	0.36
TEP-18-001	GHANA: Rehabilitation of Takoradi and Tema coast radio stations	3.05	-	-	3.05
TEP-19-005	GUINEA: Maintenance of telecommunications network	5.00	-	1.00	4.00
TEP-41-006	SUDAN: Retrofit and rehabilitation of the Sudan domestic satellite system (SUDOSAT)	17.00	-	-	17.00
TEP-48-001	ZAIRE: Rehabilitation and extension of the telephone and telex switching system	12.53	7.00	-	5.53
TEP-48-002	ZAIRE: Rehabilitation and extension of local urban networks	24.30	-	-	24.30
TEP-48-003	ZAIRE: Rehabilitation and extension of national transmission system	13.00	-	-	13.00

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-48-004	ZAIRE: Rehabilitation of power supply system	6.67	-	-	6.67
TEP-60-012	REGIONAL: Operation and maintenance: Basic studies and courses for senior staff	0.58	0.58	-	-
	2. Broadcasting				
BRP-07-003	CAPE VERDE: Purchase of maintenance and measuring equipment and spare parts	0.20	0.66		
BRP-09-005	CHAD: Rehabilitation of radio broadcasting	6.26	-	-	6.26
BRP-18-002	GHANA: Rehabilitation of Weija monitoring station	0.68	-	0.08	0.60
BRP-18-004	GHANA: Rehabilitation of radio programme production centres	0.58	-	-	0.58
BRP-28-004	MALI: Establishment of three maintenance laboratories	0.36	-	-	0.36
BRP-46-001	UGANDA: Rehabilitation of sound broadcasting network	6.73	-	1.35	5.38
BRP-46-002	UGANDA: Rehabilitation of television broadcasting network	8.27	-	0.50	7.77
BRP-46-006	UGANDA: Rehabilitation of 300 viewing and listening posts	1.65	-	0.18	1.47
	3. Postal services				
POP-11-005	CONGO: Modernization of postal service network in rural areas	1.45	-	1.45	-
POP-14-002	EQUATORIAL GUINEA: Rehabilitation of five post offices	0.25	-	-	0.25
POP-47-003	UPPER VOLTA: Reconstruction of four post offices	2.64	-	-	2.64

2. Training projects

The selection of the projects in this group has been based on the guidelines laid down by the third Conference of African Ministers of Transport, Communications and Planning resolution ECA/UNTACDA/Res. 83/23. Annex 2 carries summary details of this group of projects.

In telecommunications, there are 22 such projects, 20 of which are regional or subregional and two are national.

The projects are mainly concerned with the establishment of institutions for the training of technicians at basic and medium levels and for training in new and specialized technologies such as in satellite communications and rural telecommunications. A number of seminars and workshops in operations and maintenance techniques and in management are also provided for. Opportunities for acquisition of other skills are also provided for under projects such as "establishment of a staff exchange programme" and "development of a regional telecommunications manpower directory", both of which are regional projects.

Of the 22 projects, only one has some local earmarking; none has attracted external funding. The total cost is $164.80 million and 18.4 per cent is locally earmarked.

In the broadcasting sub-sector, there are altogether 14 training projects. Only one of these is regional. They are estimated to cost $33.52 million and of this amount, $3.77 million has been earmarked. So far, none of these projects has attracted external financing.

For the postal sub-sector, there are 16 training projects amounting to a total cost of $46.10 million. The amount of local financing pledged is $24.09 million, i.e., 54.35 per cent of the cost of the training projects. The projects concern school construction and the award of fellowships.

Annex 2: List of projects: Training (52 projects)

(1)	Total cost:	$244.32 million
(2)	Financing secured: External	$ 0.30 million
(3)	Financing secured: Local	$ 57.88 million
(4)	External financing required:	$186.19 million

Project number	Country and title	(1)	(2)	(3)	(4)
	1. Telecommunications				
TEP-18-006	GHANA: New telecommunications engineering school at Adentan	31.34	-	30.34	1.00
TEP-30-003	MAURITIUS: Telecommunications training centre	0.80	-	-	0.80
TEP-60-024	REGIONAL: Seminar on teletraffic	0.17	-	-	0.17
TEP-60-027	REGIONAL: Seminar on choice of criteria for telecommunication equipment	0.17		-	0.17
	Manpower				
MAP-60-001	REGIONAL: Follow-up of manpower and training needs surveys for 31 countries	0.35	-	-	0.35
MAP-60-002	REGIONAL: Establishment of a regional and multinational training centre for medium-level manpower for Central African countries	8.24	-	-	8.24
MAP-60-003	REGIONAL: Introduction of management courses for top and middle level personnel at existing institutions	3.74	-	-	3.74
MAP-60-004	REGIONAL: Seminars, special courses and workshops in common-carrier communications and sound broadcasting and TV	1.42	-	-	1.42
MAP-60-005	REGIONAL: Establishment of multinational institutions for training high-level staff and instructors	8.97	-	-	8.97
MAP-60-006	REGIONAL: Development of a regional telecommunication manpower inventory/ directory	0.05	-		0.05

Project number	Country and title	(1)	(2)	(3)	(4)
MAP-60-007	REGIONAL: Establishment of a multinational training centre for medium-level manpower for the lusophone countries	2.25	-	-	2.25
MAP-60-008	REGIONAL: Operations and maintenance of installations: workshops and seminars	1.00		-	1.00
MAP-60-009	REGIONAL: Rural telecommunications: workshops and seminars	0.40	-	-	0.40
MAP-60-010	REGIONAL: Establishment and strengthening of more medium-level training centres in the four subregions	35.00	-	-	35.00
MAP-60-011	REGIONAL: Establishment of more high-level training institutes	26.31	-	-	26.31
MAP 60-012	REGIONAL: Establishment of basic level centres for basic level technicians in telecommunications for countries without these facilities	10.07	-	-	10.07
MAP-60-013	REGIONAL: Further development of national basic and medium-level training centres in the East and Southern African subregions	10.00	-	-	10.00
MAP-60-014	REGIONAL: Establishment of national medium-level training centres in 26 countries where there are none at present	15.75	-	-	15.75
MAP-60-015	REGIONAL: Establishment of a regional school for satellite communications	2.50	-	-	2.50
MAP-60-016	REGIONAL: Establishment of a staff exchange programme	-	-	-	-
MAP-60-017	SUBREGIONAL: Improvement of the Mano River Union Posts and Telecommunications Training Institute	6.06	-	-	6.06
SAP-60-002	REGIONAL: Joint Seminars on communications by satellite	0.20	-	-	0.20

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Project number	Country and title	(1)	(2)	(3)	(4)
2.	Broadcasting				
BRP-10-006	COMOROS: Provision of a training expert at Radio Comores	0.07	-	-	0.07
BRP-13-002	EGYPT: Improvement of training institutes	6.00	-	-	6.00
BRP-18-003	GHANA: Improvement of facilities and training institutes for broadcasting	19.32	-	3.52	15.80
BRP-19-007	GUINEA: Staff training for radio and television programming and transmission centres	0.28	-	-	0.28
BRP-22-001	KENYA: Feasibility study on improvement of the Institute of Mass Communications	0.28	-	-	0.28
BRP-26-002	MADAGASCAR: Feasibility study on the enlargement of the telecommunications training institute to cater for broadcasting	0.05	-	0.05	0.05
BRP-27-001	MALAWI: Extension of the multinational telecommunications training institute in Blantyre to cater for broadcasting technicians	0.45	-	-	0.45
BRP-29-002	MAURITANIA: Establishment of a specialized manpower training centre	1.80	-	-	1.80
BRP-35-003	RWANDA: Training of senior staff		-	-	-
BRP-46-013	UGANDA: In-plant training for maintenance technicians	1.75	-	0.25	1.50
BRP-49-004	ZAMBIA: Training of broadcasting personnel	0.75	-	-	0.75
BRP-50-002	ZIMBABWE: Assistance in broadcasting management training	0.50	-	-	0.50
BRP-50-003	ZIMBABWE: Strengthening of Zimbabwe Institute of Mass Communications	2.00	-	-	2.00
BRP-60-003	REGIONAL: Seminars and working groups at subregional level on management and				

Project number	Country and title	(1)	(2)	(3)	(4)
3.	Postal				
POP-08-006	CENTRAL AFRICAN REPUBLIC: Improvement and equipment of the national Posts and Telecommunications School	1.01	-	0.20	0.81
POP-10-001	COMOROS: Establishment of a vocational training centre	0.53	-	-	0.53
POP-12-001	DJIBOUTI: Establishment of a post office and a postal training centre	0.37		-	0.37
POP-20 001	GUINEA-BISSAU: Establishment of a postal training centre	0.65	-	-	0.65
POP-26 003	MADAGASCAR: Postal services training programme	0.02	-	-	0.02
POP-32-003	MOZAMBIQUE: Establishment of a multi-national postal training school at Beira	4.00	-		4.00
POP-34-001	NIGERIA: Postal management college	23.60	-	23.60	-
POP-35-003	RWANDA: Reorganization of the Kigali postal training centre	0.30	-	-	0.30
POP-42-002	SWAZILAND: Establishment of a national postal and telecommunications training centre	1.80	-		1.80
POP-44-007	TOGO: Establishment of a national posts and telecommunications school	3.20	-	-	3.20
POP-50-003	ZIMBABWE: Establishment of a postal training centre at Harare	1.50	-	-	1,50
POP-60-002	UPU: Establishment of a multinational postal school at Brazzaville	3.50	0.30	-	3.20
POP-60-010	ECA/UPU: Specialized training	1.80	-	-	1.80
POP-60-015	UPU: Establishment of a postal research centre	1.88	-		1.88
POP-60-016	UPU: Preparation of modular courses for national and multinational schools	1.20	-	-	1.20
POP-60-020	UPU: Training of African postal specialists to promote technical co-operation among developing countries in Africa	0,72	-	-	0.72

3. Technical assistance projects

Annex 3 carries details of this group.

In telecommunications, there are five such projects and all are regional. Four of these projects are variously concerned with provision of assistance and expertise in establishment of maintenance procedures, development planning and management techniques. One is concerned with a feasibility study on a Regional African Satellite Communication System.

The total cost of the projects in the group is estimated at $9.60 million. None of these projects has so far attracted any external funding.

In broadcasting, there are nine technical assistance projects and all but one is regional. The only national project is concerned with the provision of assistance in manpower planning and development. The regional projects deal with a variety of development assistance requirements in rural broadcasting, news agencies, content and technical monitoring, general broadcasting and in fabrication of equipment components of a proven locally designed low-cost sound broadcasting system.

One of these nine projects has so far attracted partial financing from external sources (UNESCO). Funding so far secured or committed constitutes about 3 per cent of the total requirement of $18.90 million.

For the postal sub-sector, there are 10 such projects, that is 7.4 per cent of the total number of postal projects. Their cost represents about 1 per cent of the total and amounts to $5.11 million. The amount of financing pledged is $0.49 million or 7.85 per cent of the cost of the postal projects.

Annex 3: List of projects: Technical assistance (24 projects)

(1)	Total cost:	$ 33.71 million
(2)	Financing secured: External	$ 0.49 million
(3)	Financing secured: Local	$ 0.56 million
(4)	External financing required:	$ 32.66 million

Project number	Country and title	(1)	(2)	(3)	(4)
	1. Telecommunications				
TEP-60-008	REGIONAL: Direct assistance to countries for the introduction of maintenance procedures	3.00	-	-	3.00
TEP-60-009	REGIONAL: Assistance and provision of expertise for telecommunication sectoral development	2.15	-	-	2.15
TEP-60-010	REGIONAL: Provision of assistance in planning to a number of countries	0.49	-	-	0.49
TEP-60-011	REGIONAL: Assistance in reorganization and provision of expertise in management and organizational methodology	0.50	-	-	0.50
SAP-60-001	REGIONAL: Feasibility study on the Regional African Satellite Communication System	3.50	-	-	3.50
	2. Broadcasting				
BRP-10-003	COMOROS: Expert in broadcasting management and planning	0.04	-	-	0.04
BRP-60-001	REGIONAL: Development of broadcasting in Africa	9.50	-	-	9.50
BRP-60-002	REGIONAL: Development of the URTNA rural broadcasting centre at Ouagadougou	2.00	-	-	2.00
BRP-60-007	REGIONAL: Assistance to the URTNA Programme Exchange Centre	0.22	-	-	0.22
BRP-60-010	REGIONAL: Assistance for the development of news agencies	5.00	-	-	5.00
BRP-60-011	REGIONAL: African institute for communication development	0.85	0.85	-	0.29
BRP-60-013	REGIONAL: Follow-up project on the fabrication of some components of the model low-cost sound broadcasting system	0.65	-	-	0.65

Project number	Country and title	(1)	(2)	(3)	(4)
BRP-60-014	REGIONAL: Assistance to the Pan-African News Agency in the field of equipment, manpower training and technical operations	-	-	-	-
BRP-60-015	REGIONAL: Establishment of a broadcasting planning and development unit (nucleus)	0.70	-	-	-
	3. Postal services				
POP-04-001	BOTSWANA: Administrative decentralization of postal services	0.18	-	-	0.18
POP-14-001	EQUATORIAL GUINEA: Development of postal services	0.05	-	-	0.05
POP-48-006	ZAIRE: Study for the improvement of Giro services	0.35	-	-	0.35
POP-48-007	ZAIRE: Study for the construction of a printing unit	0.10	-	-	0.10
POP-60-005	UPU: Mobilization of savings by postal means, particularly in rural areas	1.40	0.49	-	0.91
POP-60-006	ECA: Development planning for postal services in least developed countries	0.48	-	-	0.48
POP-60-009	UAPT: Study for the drawing up of a regional routeing plan and organization of services	0.65	-	-	0.65
POP-60-018	UPU: Elaboration of regional and sub-regional postal statistical models	0.70	-	-	0.70
POP-60-019	UPU: Establishment and development of statistical and planning units within postal administrations	0.70	-	-	0.70
POP-60-021	PAPU: Establishment of a postal regulation and legislation committee	0.50	-	-	0.50

4. Other regional, subregional and national projects with subregional implications

These are regional, subregional or national projects with subregional implications which cannot be grouped with any of the three preceding groups. Details of such projects are summarized in Annex 4.

In the telecommunications sub-sector, there are 75 such projects estimated to cost $505.30 million. Of this, $55.4 million has been locally earmarked and $53.62 million committed or secured from external sources. Altogether 22 per cent of the funds required have been secured or locally committed.

In broadcasting, there are only three such projects and they are regional study projects. Their cost is estimated at $2.54 million and none has obtained financing.

In the postal sub-sector, there are 17 projects, 12 of which concern the construction of regional transit centres and four the manufacture of postal equipment.

They account for 12.6 per cent of all the postal projects. The over-all cost, estimated at $168.05 million, represents 32.1 per cent of the total cost of the postal projects. Only $0.70 million in external financing has been pledged, i.e., 0.32 per cent of the cost of these projects.

Annex 4: List of projects: Other regional (95 projects)

(1)	Total cost:	$675.89 million
(2)	Financing secured: External	$ 54.96 million
(3)	Financing secured: Local	$ 55.34 million
(4)	External financing required:	$565.59 million

Project number	Country and title	(1)	(2)	(3)	(4)
	1. Telecommunications				
TEP-01-001	ALGERIA: Inmarsat coast station	4.50	-	-	4.50
TEP-05-001	BURUNDI: Improve UHF radio link to Zaire	0.10	-	-	0.10
TEP-05-004	BURUNDI: Extension of satellite earth station capability	0.12	-	-	0.12
TEP-06-006	CAMEROON: Frequency monitoring and receiving station	1.60	-	-	1.60
TEP-08-002	CENTRAL AFRICAN REPUBLIC: Installation of tropospheric scatter link Bangui-Impfondo (Congo)	1.50	-	-	1.50
TEP-09-001	CHAD: Reconstruction of the satellite earth station at N'Djamena	8.33	-	-	8.33
TEP-10-001	COMOROS: Establishment of an earth station and installation of international switching equipment	4.00	-	-	4.00
TEP-11-001	CONGO: Establishment of an international telephone exchange	12.00	-	-	12.00
TEP-11-004	CONGO: Extension of the earth station at Moungouni	0.64	-	0.64	-
TEP-11-009	CONGO: Installation of an international telex switching centre	3.18	-	3.18	-
TEP-12-005	DJIBOUTI: Submarine cable system	8.00	-	-	8.00
TEP-13-001	EGYPT: Construction of the Aswan-Wadi Halfa (Sudan) microwave link	20.00	-	-	20.00
TEP-14-001	EQUATORIAL GUINEA: Establishment of a satellite earth station and related facilities	8.00	-	-	8.00
TEP-14-003	EQUATORIAL GUINEA: Provision and installation of a telex and international telephone exchange	0.18	-	-	0.18

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-15-006	ETHIOPIA: Implementation of broadband microwave link between Assab (Ethiopia) and Djibouti	0.96	-	-	0.96
TEP-15-007	ETHIOPIA: Implementation of Ethiopia-Sudan (Bahf Dar-Gedaref) microwave radio-relay system	1.84	-	-	1.84
TEP-16-002	GABON: New coast station at Libreville	12.10	-	-	12.10
TEP-18-004	GHANA: Wenchi-Bui-Wa-Lawra-Hamile/Upper Volta border UHF radio link	5.93	-	1.76	4.17
TEP-18-005	GHANA: Sunyani-Berekum-Dormaa Ahenkro-Sampa/Yamosikro (Ivory Coast) UHF radio link	2.18	-	1.35	0.83
TEP-18-007	GHANA: Accra-Bolgatanga microwave link	28.41	26.00	2.41	-
TEP-19-001	GUINEA: Establishment of an international communications transit centre	4.00	-	0.80	3.20
TEP-19-009	GUINEA: Extension of Intelsat B station	2.00	-	0.40	1.60
TEP-24-001	LIBERIA: Telecommunications expansion/ standard A earth station	15.00	-	-	15.00
TEP-24-003	LIBERIA: Provision of coastal communication station	1.83	-	-	1.83
TEP-24-004	LIBERIA: Telecommunications expansion/ Inmarsat station	8.00	-	-	8.00
TEP-31-001	MOROCCO: Establishment of five coastal stations	3.00	-	1.10	1.90
TEP-34-002	NIGERIA: Installation of Enugu satellite earth station	24.32	-	24.32	-
TEP-34-003	NIGERIA: Third satellite earth station, replacement of Lanlate I	1.00	-	1.00	-
TEP-34-004	NIGERIA: Inmarsat earth station for maritime communications	1.23	-	1.23	-
TEP-34-005	NIGERIA: International telex exchange at Enugu	6.40	-	6.40	-
TEP-34-006	NIGERIA: Abuja international switching centre	9.60	-	9.60	-
TEP-35-001	RWANDA: International link: Mt. Jari (Rwanda)-Ngara (United Republic of Tanzania)	0.20	0.18	0.02	-

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-35-002	RWANDA: International link: Cyangugu (Rwanda)-Bukavu (Zaire)	0.16	-	-	0.16
TEP-35-003	RWANDA: International link: Kigali (Rwanda)-Bujumbura (Burundi)	1.50	1.36	0.14	-
TEP-37-001	SENEGAL: Extension of the «Fraternity» submarine cable (Abidjan-Dakar)	0.35	-	0.35	-
TEP-37-002	SENEGAL: Extension of the international telephone transit exchange	4.00	-	-	4.00
TEP-37-004	SENEGAL: Extension of the international telex transit exchange	1.00	-	-	1.00
TEP-37-017	SENEGAL: Construction of a submarine cable warehouse at Dakar	1.25	-	-	1.25
TEP-39-002	SIERRA LEONE: Telecommunication satellite earth station, standard A	6.00	-	-	6.00
TEP-41-001	SUDAN: Implementation of the Sudan-Egypt (Atbara-Wadi Halfa-Aswan) microwave radio-relay system	8.00	-	-	8.00
TEP-41-002	SUDAN: Implementation of the Sudan-Ethiopia (Gedaref-Bahr Dar) microwave radio-relay system	2.50	-	-	2.50
TEP-41-003	SUDAN: Feasibility study and preliminary field survey for the continuation of the UHF link across the north-western Kenya border to Kapoita, Torit till Juba	0.50	-	-	0.50
TEP-41-005	SUDAN: Upgrading of the Umm Haraz international earth station	1.00	-	-	1.00
TEP-42-001	SWAZILAND: Provision of four wire trunk transit switching exchanges	4.32	-	0.43	3.89
TEP-43-001	UNITED REPUBLIC OF TANZANIA: Tanzania-Rwanda microwave link (Ngara terminal)	0.13	0.11	0.02	-
TEP-43-002	UNITED REPUBLIC OF TANZANIA: Tanzania-Burundi microwave link	0.47	0.35	0.12	-
TEP-43-003	UNITED REPUBLIC OF TANZANIA: Tanzania-Malawi microwave link	0.18	0.16	0.02	-
TEP-43-004	UNITED REPUBLIC OF TANZANIA: Tanzania-Uganda microwave link	0.45	0.42	0.03	-

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-44-001	TOGO: Reinforcement of the Ouagadougou-Lome-Cotonou microwave links	2.50	-	-	2.50
TEP-44-002	TOGO: Establishment of coastal station	0.80	-	-	0.80
TEP-44-011	TOGO: International telephone transit centre	2.00	-	-	2.00
TEP-47-004	UPPER VOLTA: Microwave transmission link: Fada N'Gourma-Pana (Upper Volta) and Natitingou (Benin)	0.91	-	-	0.91
TEP-49-001	ZAMBIA: Extension of satellite earth station	14.40	-	-	14.40
TEP-50-001	ZIMBABWE: Installation of standard A earth station	12.60	-	-	12.60
TEP-60-001	REGIONAL: Implementation of PANAFTEL project	207.77	24.40	-	183.37
TEP-60-002	REGIONAL: PANAFTEL project phase II: Survey of additional routes	3.50	1.00	-	-
TEP-60-003	REGIONAL: Rural telecommunications: Survey	0.70	-	-	0.70
TEP-60-004	REGIONAL: Rural telecommunications: Pilot project	1.34	-	-	1.34
TEP-60-005	REGIONAL: Feasibility study, manufacturing and research	1.50	-	-	1.50
TEP-60-006	REGIONAL: Study on joint utilization of satellite communication earth station facilities for common-carrier communication	0.60	-	-	0.60
TEP-60-007	REGIONAL: Study and evaluation of organizational arrangements and promotion of management efficiency	0.50	-	-	0.50
TEP-60-013	REGIONAL: Fellowships for training in telecommunications development planning	0.60	-	-	0.60
TEP-60-014	REGIONAL: Establishment and improvement of regional primary synchronizing and frequency monitoring centres	5.00	-	-	5.00
TEP-60-015	REGIONAL: Study for the establishment of subregional maritime radio transmission centres	0.06	-	-	0.06

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-60-016	REGIONAL: East African (including island countries) submarine cable links and possible link up to the Pacific Ocean system	0.30	-	-	0.30
TEP-60-017	REGIONAL: Study on the possibilities for industrialization in the field of telecommunications equipment	0.10	-	-	0.10
TEP-60-018	REGIONAL: Establishment of a laboratory for the repair and calibration of masuring equipment	1.50	-	-	1.50
TEP-60-019	REGIONAL: Survey of Comoros-Madagascar-United Republic of Tanzania link	0.04	-	-	0.04
TEP-60-020	REGIONAL: Burundi-Rwanda-United Republic of Tanzania-Uganda PANAFTEL link	9.00	-	-	9.00
TEP-60-021	REGIONAL: Malawi-United Republic of Tanzania microwave link	4.50	-	-	4.50
TEP-60-022	REGIONAL: Administrative and technical conference on telecommunications	0.85	-	-	0.85
TEP-60-023	REGIONAL: UAPT: Data Bank	0.50	-	-	0.50
TEP-60-026	REGIONAL: Creation of a subregional pilot centre for maintenance	0.15	-	-	0.15
TEP-60-028	REGIONAL: Rwanda/Uganda: Establishment of Kigali-Kampala international link	0.82	0.70	0.12	-
TEP-60-029	REGIONAL: Subregional co-ordinating meeting	0.80	-	-	0.80
	2. Broadcasting				
BRP-60-004	REGIONAL: Feasibility study on a TV film industry in Africa	0.24	-	-	0.24
BRP-60-005	REGIONAL: Feasibility study on the teaching of African languages by radio and television	0.30	-	-	0.30
BRP-60-006	REGIONAL: Regional radio propagation studies of all frequency bands	2.00	-	-	2.00
	3. Postal				
POP-03-001	BENIN: Establishment of a regional transit centre at Cotonou	2.15	-	-	2.15
POP-06-001	CAMEROON: Establishment of a regional transit centre at Douala	21.84	-	-	21.84

Project number	Country and title	(1)	(2)	(3)	(4)
POP-11-001	CONGO: Establishment of a regional postal transit centre at Brazzaville	13.89	-	-	13.89
POP-18-001	GHANA: Establishment of a regional transit and training centre at Accra	22.00	-	-	22.00
POP-21-001	IVORY COAST: Establishment of a workshop for manufacturing postal material at Abidjan	5.00	-	-	5.00
POP-21-002	IVORY COAST: Establishment of a workshop for manufacturing postage stamps at Abidjan	5.00	-	-	5.00
POP-26-001	MADAGASCAR: Establishment of a regional transit centre at Antananarivo	21.84	-	-	21.84
POP-28-001	MALI: Establishment of a regional transit centre at Bamako	7.00	-	-	7.00
POP-31-001	MOROCCO: Establishment of a sorting centre at Fes	4.31	-	-	4.31
POP-31-002	MOROCCO: Establishment of a sorting centre at Rabat	4.31	-	-	4.31
POP-32-001	MOZAMBIQUE: Establishment of a surface mail transit centre at Beira	10.00	-	-	10.00
POP-37-001	SENEGAL: Establishment of a regional transit centre at Dakar	10.00	-	-	10.00
POP-43.001	UNITED REPUBLIC OF TANZANIA: Establishment of an international airmail transit centre at Dar es Salaam	13.00	-	-	13.00
POP-60-003	UPU: Establihsment of workshops for manufacturing small items of postal equipment	1.18	-	-	1.18
POP-60-004	UAPT: Construction of a workshop for manufacturing postage stamps	19.00	-	-	19.00
POP-60-008	UAPT: Establishment of an African post office savings bank institute	7.13	-	-	7.13
POP-60-017	UPU: Establishment of pilot offices for postal services in rural areas of least developed African countries	0.42	-	-	0.42

5. Other national projects

This group contains national projects which cannot be grouped with rehabilitation and maintenance, training or technical assistance projects. Projects in this group are concerned with construction of infrastructure and related studies. Annex 5 carries the details.

In the telecommunciations sub-sector, there are 99 such projects, estimated to cost $1912.30 million, that is 71 per cent of the total cost of the subsectoral programme. Of this sum, $1426.50 million has either been secured or locally committed. The amount locally earmarked totals $1382.40 million, that is 72.3 per cent of the requirement.

In the broadcasting sub-sector, there are 87 such projects, estimated to cost $635.80 million. This constitutes about 89 per cent of the sub-sectoral programme. Funds so far secured or locally earmarked under this sub-sectoral group total $139.35 million which amounts to 22 per cent of the requirement.

In the postal sub-sector, there are 89 such projects. These constitute 66 per cent of the total number of postal projects, and are estimated to cost $299.40 million, i.e., 57.2 per cent of the over-all cost of the sub-sectoral programme. The amount of local financing pledged is $7.20 million, representing 5 per cent of the cost of these projects.

Annex 5: List of other national projects (275 projects)

(1)	Total cost	$2,847.57 million
(2)	Financing secured: External	$ 116.83 million
(3)	Financing secured: Local	$1,517.78 million
(4)	External financing required:	$1,212.96 million

Project number	Country and title	(1)	(2)	(3)	(4)
	1. Telecommunications				
TEP-01-002	ALGERIA: Radio frequency monitoring station	10.00	-	-	10.00
TEP-05-002	BURUNDI: Extension of exchange by 1,000 lines	0.70	-	-	0.70
TEP-05-003	BURUNDI: Extension of national network by 200 circuits	5.00	-	-	5.00
TEP-05-005	BURUNDI: Extension of rural network	0.50	-	-	0.50
TEP-05-006	BURUNDI: Extension of local cable networks by 8,000 pairs	1.00	-	-	1.00
TEP-05-007	BURUNDI: Installation of 12 new telephone exchanges in the interior of the country	1.00	-	-	1.00
TEP-05-008	BURUNDI: Installation of a new 8,000-line exchange at Bujumbura	6.50	-	-	6.50
TEP-06-001	CAMEROON: Extension of the capacity of nine telephone exchanges	7.83	7.83	-	-
TEP-06-002	CAMEROON: Extension of urban area network in six towns	5.00	5.00	-	-
TEP-06-003	CAMEROON: Construction of telephone exchanges in two towns	5.10	-	5.10	-
TEP-06-004	CAMEROON: Renovation of urgan networks in six towns	7.50	-	7.50	-
TEP-06-008	CAMEROON: Establishment of a domestic satellite station	12.70	-	-	12.70

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-07-001	CAPE VERDE: Extension of telecommunication services to the rural communities	4.50	-	-	4.50
TEP-08-005	CENTRAL AFRICAN REPUBLIC: Modernization and extension of Bangui telephone network	13.30	-	-	13.30
TEP-09-003	CHAD: Reconstruction of telephone exchange and local cable network for Abeche	0.34	-	-	0.34
TEP-09-004	CHAD: Installation of interurban transmission network	50.00	-	-	50.00
TEP-10-002	COMOROS: Extension of Moroni urban exchange	1.00	-	-	1.00
TEP-10-003	COMOROS: Telephone exchanges and local networks	7.70	-	-	7.70
TEP-11-007	CONGO: Realignment of Brazzaville-Pointe Noire coaxial cable	1.74	-	1.74	-
TEP-11-008	CONGO: Study and establishment of regional telephone exchanges	8.00	-	8.00	-
TEP-12-003	DJIBOUTI: Balbala telephone exchange	3.85	-	-	3.85
TEP-12-004	DJIBOUTI: Installation of automatic exchanges in rural areas	0.75	-	-	0.75
TEP-15-001	ETHIOPIA: Rural subscriber radio system	0.60	-	-	0.60
TEP-15-002	ETHIOPIA: Jijiba-Gode troposcatter link	1.20	-	-	1.20
TEP-15-003	ETHIOPIA: Extension of automatic exchange	1.80	-	-	1.80
TEP-15-004	ETHIOPIA: Gore-Gambela medium capacity UHF system	1.84	-	-	1.84
TEP-15-005	ETHIOPIA: Gondar-Humera troposcaller link	1.20	-	-	1.20
TEP-16-001	GABON: Extension of the telecommunications network north-east axis)	15.00	-	-	15.00
TEP-16-003	GABON: Extension of the telecommunications network (southern axis)	16.00	-	-	16.00

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-17-001	GAMBIA: National trunk switching centre, Banjul	0.78	0.78	-	-
TEP-17-002	GAMBIA: Banjul telecommunications project	17.50	17.00	0.50	-
TEP-17-004	GAMBIA: Backbone rural telecommunications transmission system	-	-	-	-
TEP-17-005	GAMBIA: Provision of nine-low-capacity automatic telephone exchanges in the rural areas	3.10	-	0.30	2.80
TEP-19-003	GUINEA: Extension of the Conakry and Kankan cable network	10.00	-	5.00	5.00
TEP-19-004	GUINEA: Telephone exchanges for 26 towns	52.00		10.40	41.60
TEP-19-007	GUINEA: Rural telecommunications network	10.00	-	2.00	8.00
TEP-19-008	GUINEA: Replacement of radio communications facilities	3.00	-	0.60	2.40
TEP-19-010	GUINEA: HF radio communications	3.20	-	0.64	2.56
TEP-22-001	KENYA: Rural telecommunications project	5.90	-	0.75	5.15
TEP-24-002	LIBERIA: Rural telecommunications project	3.30	-	-	3.30
TEP-27-001	MALAWI: National backbone trunk network	4.90	-	-	4.90
TEP-27-002	MALAWI: Urban networks for Blantyre and Lilongwe	26.50	-	0.90	25.60
TEP-27-003	MALAWI: Extension of urban networks	1.12	-	-	-
TEP-27-004	MALAWI: Telegraph and telex equipment	12.00	-	0.10	11.90
TEP-27-005	MALAWI: Development of small telephone networks	14.00		1.10	12.90
TEP-27-006	MALAWI: Development of rural telecommunications	1.09	-	-	1.09
TEP-29-001	MAURITANIA: Telecommunications development programme	24.00	10.00	-	14.00

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-31-002	MOROCCO: Installation of rural transmission network	32.00	-	-	7.00
TEP-31-003	MOROCCO: Installation of rural telephone exchange	15.20	-	-	12.00
TEP-33-001	NIGER: Installation of microwave links between Agadez and two regional capitals	3.66	-	-	3.66
TEP-34-001	NIGERIA: Lagos-Port Harcourt submarine cable	15.20	-	15.20	-
TEP-34-007	NIGERIA: Installation of telephone exchange switching equipment at 201 locations	259.20	-	259.20	-
TEP-34-008	NIGERIA: External line plant installations in 223 locations	775.85	-	775.85	-
TEP-34-009	NIGERIA: Provision of radio relay routes in transmission network	140.40	-	140.0	-
TEP-34-010	NIGERIA: Installation of telex/Gentex switching equipment	37.80	-	37.80	-
TEP-34-011	NIGERIA: Modification of terminal equipment for the domestic satellite communication sytem	43.20	-	43.20	-
TEP-34-012	NIGERIA: Radio Monitoring station	28.80	-	28.80	-
TEP-34-013	NIGERIA: Extension of the transmission network to link Lagos and Kaduna with major cities	7.23	-	7.23	-
TEP-35-004	RWANDA: Extension of the capacity of the inter urban microwave link	2.53	-	0.27	2.26
TEP-35-006	RWANDA: Extension of the CT3, CTN and local telephone exchanges	8.36	-	0.76	7.60
TEP-35-007	RWANDA: Extension of the rural network	4.00	0.32	-	3.68
TEP-36-001	SAO TOME AND PRINCIPE: Microwave link between Sao Tome and Principe	1.07	-	0.10	0.97
TEP-36-002	SAO TOME AND PRINCIPE: Telecommunications equipment	0.18	-	-	0.18

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-36-003	SAO TOME AND PRINCIPE: Extension to the telephone exchanges at Sao Tome, Neves and at Santo Antonio	1.40	-	0.46	0.94
TEP-37-005	SENEGAL: Installation of a second earth station	6.70	-	-	6.70
TEP-37-009	SENEGAL: Automation of the Casamance and Senegal/Eastern networks	29.60	-	-	29.60
TEP-37-021	SENEGAL: West African cable factory	6.84	-	-	6.84
TEP-39-001	SIERRA LEONE: Development of meteorological telecommunications	0.23	-	-	0.23
TEP-39-003	SIERRA LEONE: Extension of telecommunication facilities to the rural areas - secondary telephone network	4.00	-	0.80	3.20
TEP-39-004	SIERRA LEONE: Improvement and extension of telephone facilities in freetown urban area	11.00	-	-	11.00
TEP-39-005	SIERRA LEONE: Provision of telephone facilities along the Freetown peninsula area	3.00	-	-	3.00
TEP-39-006	SIERRA LEONE: Provision of a national telex network	3.50	-	-	3.50
TEP-39-007	SIERRA LEONE: Provision of automatic exchange at Port Loko, Njala and Moyamba towns	5.00	-	0.40	4.60
TEP-39-008	SIERRA LEONE: Establishment of radio frequency monotoring and mobilization	0.50	-	0.10	0.40
TEP-41-007	SUDAN: Capacity expansion and rehabilitationof the microwave backbone network	7.50	-	-	7.50
TEP-41-010	SUDAN: Improvement of the telegraphy services	2.00	-	-	2.00
TEP-42-002	SWAZILAND: Extension to Mbabane automatic telephone exchange	3.10	-	0.10	3.00
TEP-42-003	SWAZILAND: Extensions to rural automatic telephone exchanges	1.05	-	0.09	0.96

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-42-004	SWAZILAND: Expansion of the national radio trunk network	5.50	-	0.70	4.80
TEP-42-005	SWAZILAND: Development of rural telecommunications	0.72	-	0.20	0.52
TEP-44-003	TOGO: Modernization and extension of the underground network of eight towns in the provinces	6.50	-	-	-
TEP-44-004	TOGO: Studies on the purchanse of rural automatic exchanges	0.60	-	-	0.60
TEP-44-005	TOGO: Increase in the capacity of telephone exchanges in [illegible] major towns	8.00	-	-	8.00
TEP-44-006	TOGO: Trunk links by radio-relay	8.00	-	-	8.00
TEP-44-007	TOGO: First part of the project on the integration of the rural zone	11.00	-	-	11.00
TEP-44-008	TOGO: Installation of the radio telephone and telegraph links between Lome and 11 centres	0.80	-	-	0.80
TEP-44-009	TOGO: Installation of telephone links with tourist centres and resorts	1.00	-	-	1.00
TEP-44-010	TOGO: Frequency control and synchronization centre	3.00	-	-	3.00
TEP-44-013	TOGO: Telephone equipment for road security	1.60	-	-	1.60
TEP-44-014	TOGO: Computerization of the management of posts and telecommunication services	1.42	-	-	1.42
TEP-46-001	UGANDA: Development of rural telecommunications	3.00	-	-	3.00
TEP-46-002	UGANDA: Jinga-Tororo-Gulu trunk route and telephone exchanges	10.14	-	-	10.14
TEP-46-003	UGANDA: Kampala-Mbarara radio-relay link	4.80	2.30	-	2.50
TEP-47-001	UPPER VOLTA: Introduction of automatic system in five towns	2.10	-	-	2.10

Project number	Country and title	(1)	(2)	(3)	(4)
TEP-47-002	UPPER VOLTA: Construction of automatic exchange and associated local network at Po	0.63	-	-	0.63
TEP-47-003	UPPER VOLTA: Provision of local exchange equipment	0.21	-	-	0.21
TEP-47-005	UPPER VOLTA: Extension of the telephone exchange and local network of Fada N'Gourma	0.87	-	-	0.87
TEP-47-006	UPPER VOLTA: Installation of telephone channelling equipment	0.80	-	0.80	-
TEP-49-002	ZAMBIA: Radio monitoring station	1.89	-	-	1.89
	2. Broadcasting				
BRP-03-001	BENIN: Assistance for the development of the national broadcasting and TV network	4.80	-	-	4.80
BRP-03-002	BENIN: Development of the West and Central African press agencies	0.60	-	0.08	0.52
BRP-03-003	BENIN: Extension of radio and television services	15.80	-	-	15.80
BRP-04-001	BOTSWANA: Improvement of the shortwave broadcasting network	2.60	-	-	2.60
BRP-04-002	BOTSWANA: Improvement of the VHF broadcasting network	0.20	-	-	0.20
BRP-04-003	BOTSWANA: Establishment of radio information centres in eight towns	0.24	-	-	0.24
BRP-05-003	BURUNDI: Introduction of television	5.20	-	-	5.20
BRP-05-004	BURUNDI: Regional sound broadcasting studios	4.20	-	-	4.20
BRP-06-001	CAMEROON: Installation of a national colour television network	187.00	73.00	30.00	84.00
BRP-06-002	CAMEROON: Study and installation of a national VHF/FM broadcasting network	6.30	-	2.10	4.20
BRP-06-003	CAMEROON: Improvement of MW coverage in five cities and construction of sound broadcasting production centre at Douala	45.00	-	5.00	40.00

Project number	Country and title	(1)	(2)	(3)	(4)
BRP-06-004	CAMEROON: Installation of a MW transmitter and reconstruction of the sound broadcasting production centre at Buea	5.00	-	-	5.00
BRP-06-005	CAMEROON: Study and construction of a monitoring centre in the Mbalmayo area	3.85	-	1.00	2.85
BRP-06-006	CAMEROON: Improvements to the radio broadcasting station in Bamenda	12.50	-	5.00	7.50
BRP-06-007	CAMEROON: Establishment of four regional radio stations	50.00	-	12.50	37.50
BRP-06-009	CAMEROON: Procurement of 10 mobile stations	2.50	-	0.50	2.00
BRP-07-001	CAPE VERDE: Installation of transmitters and additional VHF/FM studio equipment	0.35	-	-	-
BRP-07-002	CAPE VERDE: Installation of a television transmission system and equipment of a studio	0.85	-	-	-
BRP-07-004	CAPE VERDE: Installation of a HF transmitter for overseas services	0.50	-	-	-
BRP-07-005	CAPE VERDE: Construction of a radio and television centre	1.00	0.66	-	-
BRP-08-003	CENTRAL AFRICAN REPUBLIC: Installation of community television receiving centres	0.50	0.50	-	-
BRP-08-005	CENTRAL AFRICAIN REPUBLIC: Reinforcement of equipment at the programming centre	0.45	-	-	0.45
BRP-08-006	CENTRAL AFRICAN REPUBLIC: Improvement of radio coverage	1.58	-	-	1.58
BRP-09-001	CHAD: Establishment of broadcasting programme production centres in five towns	0.91	-	-	0.91
BRP-09-002	CHAD: Improvement of the MW network in four towns	1.60	-	-	1.60
BRP-09-004	CHAD: Establishment of radio information centres in five towns	0.15	-	-	0.15

Project number	Country and title	(1)	(2)	(3)	(4)
BRP-11-002	CONGO: Construction of phase I of the Radio-TV House in Brazzaville	18.20	-	-	18.20
BRP-12-004	DJIBOUTI: Extension to radio and television building, construction of a new television house	2.54	-	1.50	1.04
BRP-13-003	EGYPT: Establishment of education TV and sound programmes production centre	3.00	-	1.00	2.00
BRP-14-001	EQUATORIAL GUINEA: Construction of a broadcasting house	2.00	-	-	2.00
BRP-14-002	EQUATORIAL GUINEA: Improvement of television coverage	1.90	-	-	1.90
BRP-15-001	ETHIOPIA: Provision of three regional MW stations	8.34	-	8.34	-
BRP-15-002	ETHIOPIA: Establishment of four low-power TV transmitting stations	2.00	-	2.00	-
BRP-17-001	GAMBIA: Improvement of facilities of Radio Gambia	0.30	-	0.05	0.25
BRP-17-002	Gambia: Feasibility study on the establishment of TV	0.20	-	-	0.20
BRP-17-003	GAMBIA: Development of information and broadcasting sector	1.40	-	-	1.40
BRP-19-003	GUINEA: Feasibility study on the construction of a radio and television broadcasting house	0.50	-	0.10	0.40
BRP-19-006	GUINEA: Establishment of a four television transmission centres	4.10	-	-	4.10
BRP-19-008	GUINEA: Improvement of television services	1.34	-	-	1.34
BRP-22-004	KENYA: Establishment of a new broadcasting centre	16.47	-	-	16.47
BRP-22-005	KENYA: Establishment of a national VHF/FM broadcasting system throughout the country	22.00	-	-	22.00
BRP-22-008	KENYA: Extension of rural mobile press units in 42 districts	0.74	-	-	0.74

Project number	Country and title	(1)	(2)	(3)	(4)
BRP-24-001	LIBERIA: Establishment of the Liberian rural broadcasting network	13.00	-	-	13.00
BRP-26-001	MADAGASCAR: Feasibility study on the expansion of the TV transmission network	0.25	-	-	0.25
BRP-28-001	MALI: Construction of programme production centre in four towns	4.00	-	-	4.00
BRP-29-001	MAURITANIA: Establishment of programme production centres in five cities	0.88	-	-	0.88
BRP-29-003	MAURITANIA: Installation of MW transmitters in five towns	4.47	-	-	4.47
BRP-29-004	MAURITANIA: Improvement of existing broadcasting facilities	2.24	-	-	2.24
BRP-29-005	MAURITANIA: Establishment of second programme network	2.90	-	-	2.90
BRP-29-006	MAURITANIA: Establishment of a regional rural radio	2.00	-	-	2.00
BRP-33-001	NIGER: Installation of a 20 KW short wave transmitter at Niamey	0.23	-	-	0.23
BRP-35-001	RWANDA: Battery factory	3.00	-	-	3.00
BRP-35-002	RWANDA: Implementation study for a second radio channel	0.50	-	-	0.50
BRP-35-004	RWANDA: TV coverage study	-	-	-	-
BRP-35-005	RWANDA: Equipment for the Rwandese News Agency	0.34	-	0.34	-
BRP-35-006	RWANDA: Studies for the installation of a monitoring centre	0.06	-	-	0.06
BRP-35-007	RWANDA: Improvement of nation-wide FM and SW coverage	6.50	-	-	6.50
BRP-35-008	RWANDA: Modernization of the factory for the manufacture of radio receivers	0.49	-	-	0.49
BRP-36-001	SAO TOME AND PRINCIPE: Development of broadcasting	0.24	-	-	0.24

Project number	Country and title	(1)	(2)	(3)	(4)
BRP-39-001	SIERRA LEONE: Improvement of SW broadcasting	1.01	-	-	1.10
BRP-39-002	SIERRA LEONE: Improvement and extension of the National Television Service	12.17	-	2.17	10.00
BRP-40-001	SOMALIA: Somalia Television project	2.40	-	-	2.40
BRP-43-002	UNITED REPUBLIC OF TANZANIA: Installation of MW transmitters	6.00	-	1.00	5.00
BRP-43-004	UNITED REPUBLIC OF TANZANIA: Feasibility study on TV and FM boradcasting	0.20	-	-	0.20
BRP-43-005	UNITED REPUBLIC OF TANZANIA: Broadcasting studio construction and provision of studio equipment for Dodoma and Kigoma	3.40	-	2.20	1.20
BRP-43-006	UNITED REPUBLIC OF TANZANIA: Mobile recording vans	0.56	-	-	0.56
BRP-43-008	UNITED REPUBLIC OF TANZANIA: Construction of zonal production centre in mainland Tanzania	-	-	-	-
BRP-44-004	TOGO: Extension of the programme production centre and improvement of service for Radio Lome	3.90	-	0.40	3.50
BRP-44-005	TOGO: Modernization of production equipment at Radio Kara and improvement in nation-wide reception	1.90	-	0.20	1.70
BRP-44-006	TOGO: Purchase and installation of TV equipment	3.90	-	-	3.90
BRP-45-001	TUNISIA: Extension of FM broadcasting network	3.40	-	-	3.40
BRP-45-002	TUNISIA: Installation of a second TV channel	14.20	-	-	14.20
BRP-45-003	TUNISIA: Improvement of sound broadcasting and TV coverage	42.00	-	-	42.00
BRP-46-005	UGANDA: Outside broadcasting and mobile recording units	1.81	-	0.16	1.65

Project number	Country and title	(1)	(2)	(3)	(4)
BRP-47-001	UPPER VOLTA: Installation of VHF/FM transmitters and establishment of programme production centres in six towns	6.00	-	-	6.00
BRP-47-002	UPPER VOLTA: Construction and equipment of national film centre	1.42	-	-	1.42
BRP-47-003	UPPER VOLTA: Installation of the Voltaic News Agency	8.20	-	-	8.20
BRP-47-004	UPPER VOLTA: Construction of a broadcasting house	3.40	-	-	3.40
BRP-48-001	ZAIRE: Modernization of the sound broadcasting centre at Kinshasa	0.05	-	0.05	-
BRP-48-002	ZAIRE: Construction of two TV and two sound broadcasting studios in Kinshasa	22.00	-	-	22.00
BRP-49-001	ZAMBIA: Upgrading transmitters	5.00	-	-	5.00
BRP-49-003	ZAMBIA: Regional radio and TV studios	10.10	-	-	10.10
BRP-49-005	ZAMBIA: Installation of MW transmitting stations	3.95	-	-	3.95
BRP-49-006	ZAMBIA: Radio and TV outside broad casting vans	2.50	-	-	2.50
BRP-49-007	ZAMBIA: Mass media complex	3.50	-	-	3.50
	3. Postal services				
POP-03-002	BENIN: Postal service in rural areas	1.58	0.10	-	1.18
POP-04-002	BOTSWANA: Establishment of a postal bus service	0.22	-	-	0.22
POP-05-001	BURUNDI: Construction of four post offices	0.40	-	-	0.40
POP-05-002	BURUNDI: Establishment of a national sorting centre	1.00	-	-	1.00
POP-05-003	BURUNDI: Purchase of vehicles	0.27	-	-	0.27

Project number	Country and title	(1)	(2)	(3)	(4)
POP-06-002	CAMEROON: Establishment of mail sorting centres at Yaounde and Douala	8.96	-	-	8.96
POP-06-003	CAMEROON: Establishment of Giro centres at Garoua and Limbe	3.50	-	-	3.50
POP-06-004	CAMEROON: Extension of the mobile postal service in rural areas and State-run transport services	2.02	-	-	2.02
POP-06-006	CAMEROON: Construction of a main post office with administrative services at Yaoundé	5.72	-	-	5.72
POP-08-001	CENTRAL AFRICAN REPUBLIC: Establishment of rural mobile postal services	0.39	-	-	0.39
POP-08-002	CENTRAL AFRICAN REPUBLIC: Organization and equipment of Giro centres and the national post office savings bank at Bangui	1.12	-	-	1.12
POP-08-002	CENTRAL AFRICAN REPUBLIC: Development of postal services	0.26	-	-	0.26
POP-08-004	CENTRAL AFRICAN REPUBLIC: Development of a national mail routeing network	4.50	-	1.10	3.40
POP-08-005	CENTRAL AFRICAN REPUBLIC: Modernization and development of the postal service network	0.53	-	-	0.53
POP-08-007	CENTRAL AFRICAN REPUBLIC: Modernization of financial service equipment	0.90	-	0.20	0.70
POP-08-008	CENTRAL AFRICAN REPUBLIC: Logical facilities common to the postal and telecommunications services	4.53	-	1.10	3.43
POP-09-002	CHAD: Establishment of rural mobile postal service	0.17	-	-	0.17
POP-09-003	CHAD: Purchase of postal equipment and revival of the activities of the post and Telecommunications Office	1.06	-	-	1.06
POP-09-006	CHAD: Construction of new post offices in the capital and within the country	1.00	-	-	1.00

Project number	Country and title	(1)	(2)	(3)	(4)
POP-10-002	COMOROS: Establishment of mobile post offices in rural areas	0.35	-	-	0.35
POP-10-003	COMOROS: Construction of 12 new post offices	1.47	-	-	1.47
POP-10-004	COMOROS: Construction of a central post office	0.30	-	-	0.30
POP-10-005	COMOROS: Construction of a mail sorting centre at Moroni	3.50	-	-	3.50
POP-11-003	CONGO: Organization of intra- and interregional mail routeing	0.40	-	0.40	-
POP-11-004	CONGO: Transformation of 11 postal agencies into secondary post offices	0.59	-	0.59	-
POP-11-006	CONGO: Extension of the postal network in rural areas	0.68	-	0.68	-
POP-11-007	CONGO: Opening up of rural areas through the establishment of post offices	0.59	-	0.59	-
POP-11-008	CONGO: Mechanization of counter services at the main post offices and Giro centres	0.10	-	0.10	-
POP-13-001	EGYPT: Expansion of the postal printing house	4.50	-	0.62	3.88
POP-14-003	EQUATORIAL guinea: Purchase of postal equipment	0.13	-	-	0.13
POP-14-004	EQUATORIAL GUINEA: Purchase of vehicles	0.30	-	-	0.30
POP-15-001	ETHIOPIA: Development of postal services especially in rural areas	8.32	-	-	8.32
POP-16-001	GABON: Construction of an administrative complex at Libreville	15.00	-	-	15.00
POP-16-002	GABON: Construction of a national mail sorting centre	15.00	-	-	15.00
POP-17-001	THE GAMBIA: Improvement of postal services	1.13	-	-	1.13
POP-17-002	THE GAMBIA: Post office and training school at Bakau	0.37	-	-	0.37

Project number	Country and title	(1)	(2)	(3)	(4)
POP-17-003	THE GAMBIA: Rural mail routeing	0.05	-	-	0.05
POP-19-001	GUINEA: Improvement of relations between the Post and its users	10.66	-	5.14	5.52
POP-19-002	GUINEA: Construction of a general post office at Conakry	20.00	-	-	20.00
POP-20-002	GUINEA-BISSAU: Purchase of vehicles	0.27	-	-	0.27
POP-20-003	GUINEA-BISSAU: Construction of five post offices	0.16	-	-	0.16
POP-20-004	GUINEA-BISSAU: Purchase of postal equipment	1.00	-	-	1.00
POP-21-003	IVORY COAST: Construction of postal liaison centres	2.50	-	-	2.50
POP-24-002	LIBERIA: Improvement and extension of postal services	3.01	-	-	3.01
POP-26-002	MADAGASCAR: Purchase of vehicles for transporting mail	0.45	-	-	0.45
POP-26-004	MADAGASCAR: Purchase of vans and construction of four vehicle maintenance workshops	1.55	-	-	1.55
POP-27-001	MALAWI: Establishment of two sorting centres/offices of exchange	1.50	-	-	1.50
POP-27-002	MALAWI: Establishment of 16 new post offices	2.00	-	-	2.00
POP-28-002	MALI: Equipment of 15 rural mobile post offices	0.43	-	-	0.43
POP-28-004	MALI: Establishment of an airmail office of exchange at Senou	0.52	-	-	0.52
POP-30-001	MAURITIUS: Electronic equipment for the post office savings bank	0.93	-	-	0.93
POP-32-004	MOZAMBIQUE: Establishment of an international airmail transit centre	10.00	-	-	10.00
POP-32-005	MOZAMBIQUE: Purchase and installation of stamp printing equipment	1.00	-	-	1.00

Project number	Country and title	(1)	(2)	(3)	(4)
POP-33-001	NIGER: Establishment of mobile post offices in rural areas	0.18	-	-	0.18
POP-33-002	NIGER: Supply of equipment for the money order control centre at Niamey	0.92	-	-	0.02
POP-33-003	NIGER: Establishment of eight post offices and a sorting centre	5.10	-	1.50	4.60
POP-34-002	NIGERIA: Tin Can Island port surface mail transit centre	20.50	-	20.50	-
POP-34-003	NIGERIA: Establishment of an airmail transit centre	11.60	-	11.60	-
POP-34-004	NIGERIA: Establishment of a regional transit centre at Lagos	24.30	-	24.30	-
POP-35-001	RWANDA: Establishment of a mail ane postal parcel sorting centre at Kigali	8.96	-	-	8.96
POP-35-002	RWANDA: Improvement of rural postal services	0.70	-	-	0.70
POP-35-004	RWANDA: Reorganization of the mail routeing network	0.60	-	-	0.60
POP-35-005	RWANDA: Construction of post offices in the interior	2.55	-	-	2.55
POP-36-001	SAO TOME AND PRINCIPE: Organization of mail delivery	0.03	-	-	0.03
POP-36-002	SAO TOME AND PRINCIPE: Purchase of postal equipment	0.11	-	-	0.11
POP-36-003	SAO TOME AND PRINCIPE: Rural mobile post office	0.02	-	-	0.02
POP-39-001	SIERRA LEONE: Improvement of postal servies	3.68	-	-	3.68
POP-41-001	SUDAN: Development of postal services especially in rural areas	4.00	-	-	4.00
POP-42-001	SWAZILAND: Computerization of postal and financial services	0.41	-	-	0.41

Project number	Country and title	(1)	(2)	(3)	(4)
POP-42-003	SWAZILAND: Establishment of an international airmail office of exchange	0.49	-	0.11	0.38
POP-42-004	SWAZILAND: Establishment of post offices in rural areas	0.48	-	-	0.48
POP-42-005	SWAZILAND: Establishment of a surface mail office of exchange	0.51	-	0.11	0.40
POP-44-001	TOGO: Construction of a mail sorting centre at Lomé	6.50	-	-	6.50
POP-44-002	TOGO: Construction and equipment of a new main post office at Lomé	6.32	-	-	6.32
POP-44-003	TOGO: Development and reorganization of the post office savings bank in rural areas	1.50	-	-	1.50
POP-44-004	TOGO: Purchase of postal equipment	1.00	-	-	1.00
POP-44-005	TOGO: Construction of 15 post offices	4.40	-	-	4.40
POP-44-006	TOGO: Reorganization and development of postal services in rural areas	0.40	-	-	0.40
POP-47-001	UPPER VOLTA: Construction and equipment of a sorting centre at Ouagadougou	3.40	-	0.20	3.20
POP-47-002	UPPER VOLTA: Construction of 13 new post offices	2.30	-	0.25	2.05
POP-48-001	ZAIRE: Construction of a sorting centre at Goma	7.00	-	-	7.00
POP-48-002	ZAIRE: Study on the establishment of rural mobile post office circuits and purchase of vehicles	3.00	-	-	3.00
POP-48-003	ZAIRE: Establishment of new post offices	2.00	-	-	2.00
POP-48-004	ZAIRE: Construction of a sorting centre in Kinshasa	15.00	-	-	15.00
POP-48-005	ZAIRE: Purchase of postal equipment	0.90	-	-	0.90

Project number	Country and title	(1)	(2)	(3)	(4)
POP-49-001	ZAMBIA: Construction of an office of exchange and a surface mail sorting centre	0.60	-	-	0.60
POP-49-002	ZAMBIA: Organization of mail transport	2.00	-	-	2.00
POP-50-001	ZIMBABWE: Establishment of a postal transit centre at Harare	8.00	-	-	8.00
POP-50-002	ZIMBABWE: Establishment of a sorting centre at Harare	4.20	-	-	4.20

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